X-Ray and Electro-Medical Apparatus

The
Wm. Meyer Company
Chicago, Illinois, U. S. A.

All special finishes other than regularly furnished and as stated in the catalogue, will be charged for extra and the order must be accompanied with a deposit.

Meyer Interrupterless Apparatus

THE illustration on the page opposite shows the largest machine made in cabinet type, both as to size and capacity.

Capacity: It will deliver 300 milliamperes at a maximum voltage of 150,000 volts, at the transformer terminals.

Size Over All: 62 inches high, 53 inches wide, 33 inches deep.

Cabinet Material: Five ply quarter-sawed oak veneer, dark golden oak finish, hand polished. Double rear doors, solid oak corner posts. Double truck casters.

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THE WM. MEYER COM
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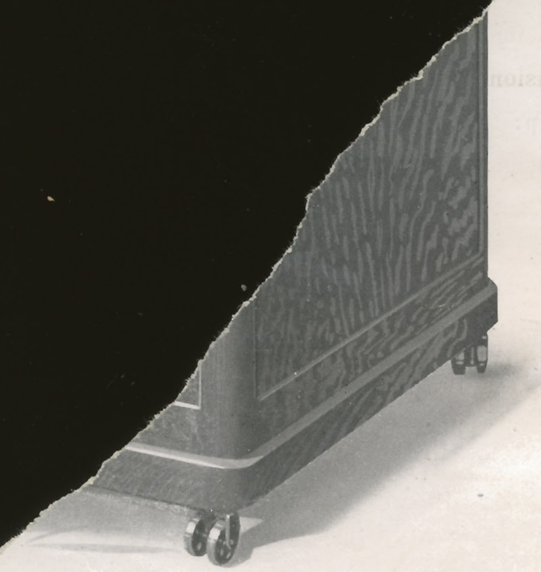
CHICAGO, ILL.



MEYER NEW MODEL TRANSFORMER

ansformer for heating Coolidge Tube, Ammeter and Portable Controller on top.

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Size Over All: 62 inches high, 53 inches wide, 33 inches deep.

Cabinet Material: Five ply quarter-sawed oak veneer, dark golden oak finish, hand polished. Double rear doors, solid oak corner posts. Double truck casters.

Motor: Single synchronous induction type. Rotor has no winding, commutator, collector rings or brushes.

High Tension Rectifier: Single disc, two segment type.

High Tension Commutating Contacts: Flexible, adjustable in direct contact with the high tension rectifier segments. Holders mounted in plate glass. Fireproof.

High Tension Conductors: Rubber covered.

High Tension Terminals: Mounted in plate glass.

Spark Gap: Adjustable, indicating series and parallel, twelve inches.

High Tension Transformer: Closed core type, efficiency 96.8%

Current Controller: Twenty-five contacts. Constant service. Series parallel type.

Current Control: Electro-magnetic in controller handle. Our exclusive feature. Patented.

Switchboard: Marbleized, wiring protected by steel back, asbestos lined. Equipped with: Motor switch, interlocking polarity indicator control switch, polarity indicator pole changer, radiograph switch, quick break X-Ray switch, time switch, pilot lamp and cartridge fuses for each circuit.

Time Switch: Electro-magnetic, control for continuous contact or automatic time break. Non-freezing mercury contact. Patented.

Milliammeter: Two scale, shunt type, reading 0-15 and 0-150 milliamperes.

Reels: Automatic, 3.

Note:—The entire machine in all its novel features is covered by letters patent as well as design patent.

The pages following give a detailed description of how a transformer is to be properly designed and tested.

THE DESIGN OF MODERN X-RAY APPARATUS

As in all other apparatus manufactured by us, we have simplified the action of the High Tension Converter to the greatest possible degree. All parts or appliances not absolutely required for the ready control or efficiency of the machine have been discarded.

Lest this statement might seem ambigious to the prospective purchaser, we will not waste his time with superlatives, but give a straight non-technical description of this our latest type apparatus.

Our transformer for stepping up the low tension alternating current is of the closed core type, i. e., the magnetic circuit is not broken by an air gap. The cut shown here gives a sectional view of such a transformer, where,

C, is the iron core.
P, the primary winding.
I, Insulating tube over the primary.
S, Secondary.

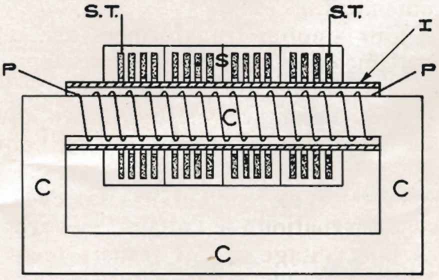


FIG. 1

The iron core is laminated, i. e., built up of thin sheets of special iron, known as transformer steel. To insure us a supply of this from the mill, we contracted for a year's supply in advance.

That part of the core on which the primary winding is to be placed is thoroughly covered with insulating material and then the primary, of double cotton covered copper magnet wire, is wound a certain number of turns on this part of the core.

The secondary "S" consisting of many thousand turns of fine copper magnet wire, bearing a certain ratio to the turns of primary wire, is prepared separately, impregnated with wax in a vacuum. Repeated careful tests are made to insure a perfect secondary.

A tube of micanite separates the primary from the secondary. This material has proven superior to any other during the fifteen years it has been in use and has shown the highest resistance in breakdown tests.

A transformer said to have, say 110,000 volts, will produce a 10-inch flame discharge across its terminals.

Assuming we have a secondary with 88,000 turns of wire and we want to get a 10-inch spark. To produce this spark requires 110,000 volts or 20,000 volts for the 1st inch spark and 10,000 volts for each additional inch. The number of turns of wire for the primary will therefore have to be $88{,}000 \div 110{,}000 \times 220 =$ 176 turns. Similarly a 150,000 volt transformer should give a fourteen inch spark.

Capacity: A commercial transformer is calculated in kilowatts. The term K. V. A. has no standing in X-Ray work and is so much Bunk to beguile victims itching for GOLD BRICKS.

A transformer intended for X-Ray work should have about 27 pounds of iron per Kilowatt to the core.

For the proper size of primary wire, one thousand circular mills must be allowed for every ampere of primary current, and for the secondary wire one circular mill for every milliampere.

Some time ago we came into possession of a transformer, which was entirely imbedded in a rosin mixture with the exception of the core ends and some inductances. Measurements with the ohmmeter gave such a high secondary resistance that we doubted the correctness of the reading although several tests agreed. By fluoroscoping the transformer, we ascertained that there were only two secondary sections of rather small size, hence the necessity for a fine wire to get the required turns, which gave a high resistance of course.

Such a high internal secondary resistance means a serious drop in voltage and consequent loss of penetration in the X-Ray tube as soon as the tube becomes warm.

Our step-up transformers are calculated to have an efficiency of 96.8 per cent, meaning that for instance a 5 K. W. transformer requires 5,165 watts to give an output of 5,000 watts.

With such well-designed proportions, our transformers can sustain a 100 per cent overload repeatedly without endangering the efficiency of the insulation in the least.

A 60 cycle current has 60 cycles or 120 alternations per second. During each alternation the voltage rises from zero to maximum and drops to zero again.

The voltage of our transformers is proportionate to the size and varies accordingly. The high voltage transformer will excite a hard tube, when it gets beyond the range of a lower voltage. In fluoroscopy this high voltage is appreciated since the usual proportion of soft rays, dangerous to the skin, is eliminated and the milliamperage of current required materially reduced. Since 1,200 milliampere seconds is an erythema dose, if the rays are not filtered, it follows that more care should be given to this item by manufacturers.

Important

These transformers are however used for intermittent work and furthermore a few degrees of each alternation only are used. If therefore a transformer designed for this work has the correct proportions, one of two kilowatt commercial proportions will be large enough. It makes no difference whether a certain salesman claims fifteen kilowatts for his product and the other claims five. What you want and need is a certain number of milliamperes required to do certain work.

Since the Coolidge tube has a very stable resistance and is therefore well adapted for making a test, it offers a means of putting all claims for transformer capacity on a common basis.

If you intend to limit your work to radiography, fluoroscopy of the thorax and long bones, and ordinary radio-therapy, a transformer furnishing a 7 inch rectified spark will be sufficient. It should furnish a maximum amount of current of 90 milliamperes with a six to six and one-half inch back up spark, if it is desired to do radiography of the gastro intestinal tract, without an intensifying screen, or if an intensifying screen is used, fifty milliamperes will be sufficient.

If in addition to radiography, fluoroscopy of the gastro intestinal tract is contemplated, the transformer must have a sufficient potential to deliver a 9-inch rectified spark to enable you to use a sharp focus Coolidge tube for fluoroscopy, with a current of two milliamperes.

If in addition to the above, deep radio therapy is to be done, the transformer must have a 10-inch rectified spark to furnish five to ten milliamperes of current with a back-up spark of nine inches plus.

This covers practically all the requirements of the transformer when used for X-Ray work.

Experience has proven that X-Ray tubes will last longer if used with the minimum amount of current permissible, therefore in radiography of the bony structure and all organs not given to periodic movement, the minimum current will be most beneficial to the tube.

COMMUTATION

The high voltage alternating current is not useful for the regular X-Ray tube and must be rectified or commuted into a uni-directional current. This is accomplished by means of a large disc equipped with two metal segments, rotating in synchronism with the alternating current. The metal segments of the disc make alternate contact with a set of four brushes, the holders of which are mounted in plate glass.

Copper conductors, heavily insulated with rubber, conduct the high tension alternating current to two of the brushes, while from the other two brushes, two conductors lead to the high tension terminals on top of the cabinet. The length of the metal segments is so proportioned that the peak of each alternation only is commuted. Fig. 2 shows how. Fig. 3 shows this diagrammatically.

Since the length of each alternating current wave is one-half cycle, or 180 degrees, the peak of the wave must be at 90 degrees as shown. From 0 up to a certain angle the rise is very rapid, then follows a period where the curve is more horizontal and another period when it drops rapidly to zero. This nearly horizontal part of the curve represents all the useful part of the alternation which should be used. This is usually expressed in degrees.

Various manufacturers use different amounts varying from 60 to 15 degrees. If 15 degrees is sufficient to produce brilliant contrasty radiographic negatives with reasonable speed, anything above must be hard on the X-Ray tube.

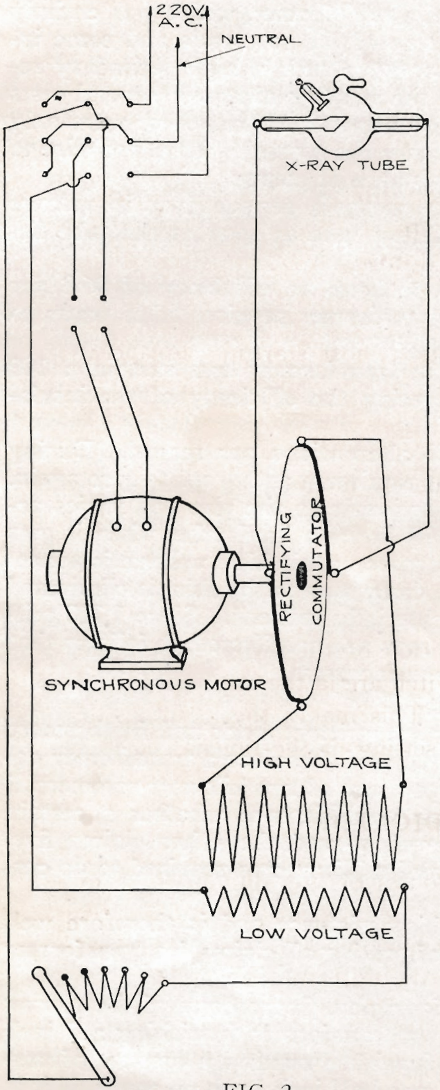


FIG. 2.

That such is actually the case has been repeatedly demonstrated by us. Another manufacturer uses over 60 degrees with a subsequent rapid wear of X-Ray tube. Is it surprising that the users of such misfits should deny the possibility of doing work more economically with a Meyer Transformer, when they have never operated one. The fact, that our method uses contact brushes (patent applied for), where others use a spark gap, gives users of our machine some 10,000 volts greater pressure at the X-Ray tube.

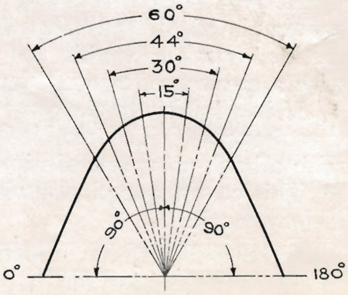


FIG. 3.

The commutating disc is of course of insulating material, hard baked mica, as solid and stiff as a circular saw. Its center is secured to the motor shaft by an aluminum bronze hub. Disc and rotor are balanced together, so as to eliminate vibration. This is one reason why Meyer machines are recognized as the quietest of all.

MOTOR

The motor used in this machine presents a most startling advance in synchronous motor design having an iron rotor **without any winding.** The speed with which this motor falls into step with the current and remains so under the heaviest load is a pleasant surprise. So perfect is the balance of this motor and disc we do not bolt it to the frame work, merely mount it on pins so it cannot be shifted from the correct position.

SWITCHBOARD

A change has been made in the disposition of the switches and the fuses. The radiographic and the manual X-Ray switch are in the upper left hand space, while the automatic timer is at the right. This makes the handling of either very much more convenient, especially the setting of the timer.

POLARITY INDICATOR

The Polarity Indicator retains its position below the illuminating lamp, and the pole changer right below the indicator. Whichever direction the polarity indicator may show, throw the pole changer switch in the same direction and the high tension current will flow through the milliammeter and properly connected tube in the right direction.

The Value of such a polarity indicator cannot be overestimated, since it is useful for more than one purpose. It shows whether or not the disc is in synchronism and if the line voltage is normal. Should the current be interrupted at the central station for even one hundredth of a second, this instrument will show it. The size of this meter is so large and its graduations are sufficiently detailed to show even slight variations in line voltage or irregular running of the A. C. generator at the central station.

In several manufacturers' catalogues where an attempt is made to discourse upon the meaning of a 60 cycle current, the statement is made that a motor to operate in synchronism must make 1,800 revolutions. There are no A. C. Generators operating that close. Belt driven generators especially, are likely to vary, due to slippage, and the actual cycles may be from 50 to 70, therefore the motor must be sufficiently sensitive to respond instantly.

FUSES

All circuits are provided with cartridge fuses of proper size, thus preventing the overloading of any circuit through carelessness. Should any such fuse be blown from one cause or another, it must be instantly replaced with one of the same capacity. The substitution of fuses of larger capacity **is not permitted.**

CONTROL

Experience has proven, that a rheostat must have rather fine graduation at the beginning where a current from 0 to 10 milliamperes is controlled, while for radiographic work, five milliampere steps are sufficient. The rheostat here shown has been in use now for years and proven equal to all demands.

The wire will not get brittle with age, nor alter its resistance appreciably during normal variations in temperature. The coils are wound on asbestos tubes and there is ample ventilation. The contacts are segmental in shape, far superior to the round buttons, and the self adjusting contact shoes of the lever makes a smooth, easy gliding contact. The position of the rheostat below the switches is such that the lever is easily reached.

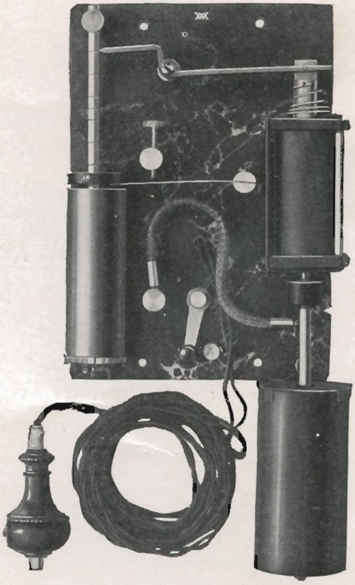
THE EXCLUSIVE FEATURE not found in any other X-Ray machine and being fully covered by Letters Patent, is that the controller handle is fitted with a device which opens and closes the transformer circuit, so that the regulation of the current as well as the closing and opening of the circuit are all accomplished with one hand. The controller is also connected with the automatic timer, simplifying the work and reducing it to a minimum.

WHY WE DO NOT USE CHOKE COILS OR INDUCTANCES

As shown in Fig. 1, the primary winding of our step-up transformers is within the secondary. This insures the greatest efficiency and economy in X-Ray tubes. This is why we need only 15 degrees or the very peak of each wave, to get the best results obtainable.

Put inductances on the other leg of a closed core transformer or add choke coils to either open or closed core transformer and the alternating current wave becomes distorted. Under these conditions the heating effect and consequent rapid destruction of the X-Ray tube is a positive fact, thoroughly understood by those who have had the experience.

To control the current without materially affecting the voltage is what our method of control has solved to perfection.



AUTOMATIC TIME SWITCH

AUTOMATIC TIME SWITCH

This important device for the correct timing of short exposures was the first to have a non-sticking contact and is to-day the most efficient and compact. Its special features are being fully covered by patents. There are no flimsy clock-works or inaccessible parts hidden within a box, all parts being easily accessible to inspection. It is handsomely finished.

HIGH TENSION INSULATION

This is carried out in a most painstaking manner. Since our transformers have a higher voltage, the greatest care has been taken to insulate the conductors with rubber throughout.

There are no exposed terminals in front, and the terminal posts on top are mounted in plate glass.

HIGH TENSION TERMINALS

The machine is equipped with parallel and series spark gap. The first to measure and the latter to regulate the tube vacuum.

FLUOROSCOPY

This is where the relative values of different transformers can be well observed. The aim is to do fluoroscopy with as little current passing through the X-Ray tube as possible, to protect the operator and save the patient. The higher the voltage, the greater the quantity of penetrating and non-dermic rays and the less current required.

Our transformer will do first class fluoroscopy of the gastro-intestinal tract with **less than two** milliamperes. **We guarantee it.** Look through the various catalogues and see if any other manufacturer comes out and makes a positive statement like this.

RADIO-THERAPY

The transformer design is such that by a reversal of a double throw line switch, the 110-volt current is connected with the primary of the transformer, reducing the secondary voltage fifty per cent. This enables the operator to obtain any desired quantity of soft rays for the treatment of superficial lesions. For Deep Therapy, the 220-volt current should be used.

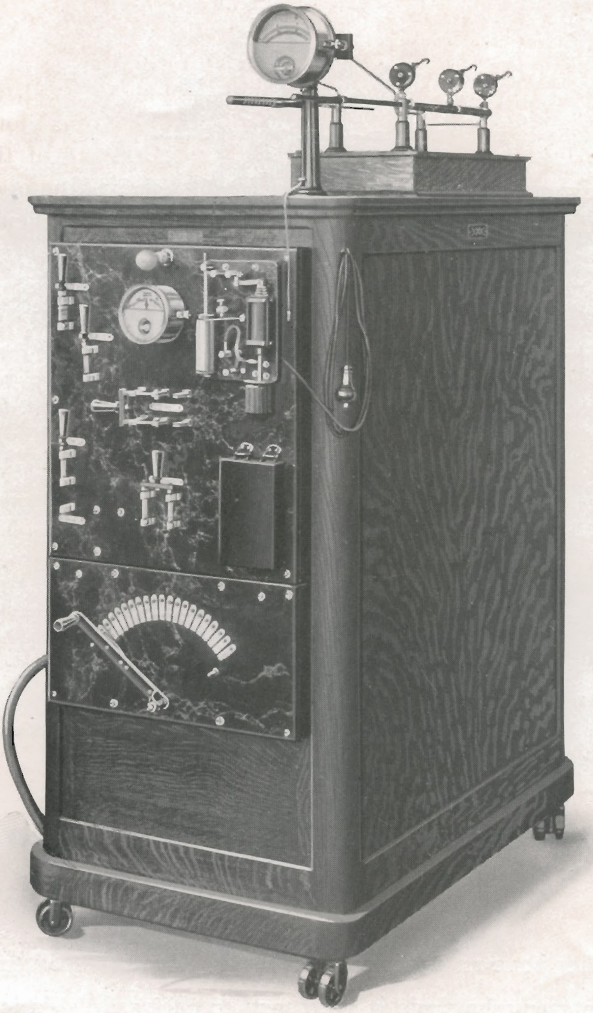
RADIOGRAPHY

In no other way is it possible to obtain a high milliamperage **without a drop of voltage** as with the closed core transformer. To put 200 milliamperes through a tube of proper capacity or 150 milliamperes through a tube having a penetration of 10 inches Meyer penetrometer offers no difficulty. Necessarily the tube must be one suited to this work and have a proper focus to accommodate this large current volume, and for general use such current volume is not to be recommended, because it is hard on the tubes.

Radiographs of the thorax and gastro-intestinal tract will show all the brilliancy that can be obtained from a plate.

Exposure time is an important item which has heretofore been left to guess work. Our exposure chart will tell accurately the correct time of exposure in seconds when the distance at which the radiograph is to be taken, the thickness of the object, the penetration of the tube and the current flow through same, have been ascertained.

By this means, radiography is lifted from empirical haphazard guess work to a mathematical certainty with a corresponding improvement in results. The mere beginner who has received our instructions will take better radiographs than the most prominent guesser without same. Those who have tried same would not be without it.



MEYER NEW MODEL NO. 6 TRANSFORMER

The specifications for the No. 6 machine are the same as for the No. 8, with the following exceptions:

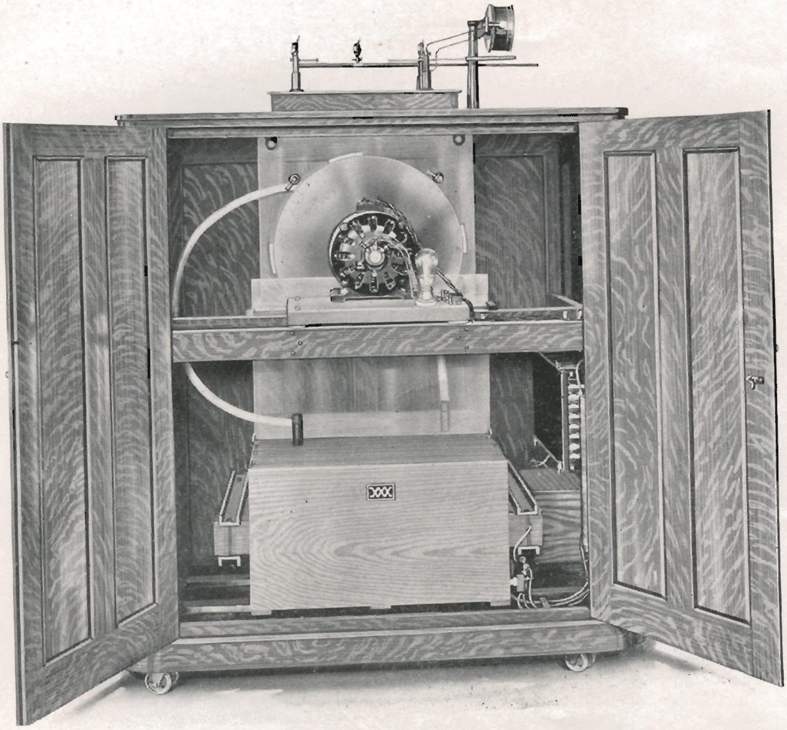
Capacity: It will deliver 200 milliamperes at the transformer terminals, at a maximum voltage of 135,000 volts.

Size Over All: 58 inches high, 47 inches wide, 32 inches deep.

Current Controller: Twenty contacts. Constant service. Series parallel type.

Current Control: Electro-magnetic with pendant push button attached to time switch. Electro-magnetic control in controller handle, will be on special order only. (See price list.)

Milliammeter: Two scale, shunt type, reading 0-15 and 0-150 milliamperes.



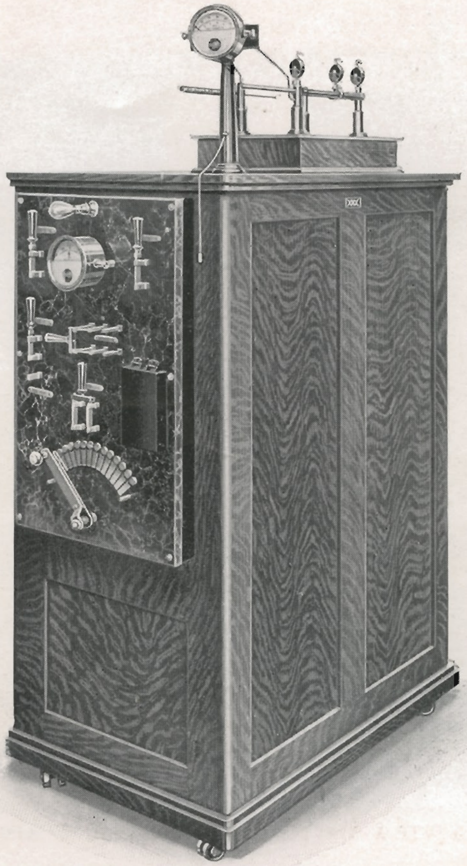
REAR INSIDE VIEW OF No. 8 AND No. 6 A. C. APPARATUS

Will you rather have an experiment or a well proven apparatus?

The manufacturer who finds it necessary to change the design of the transformer he offers every year or two, is offering you an experiment for as soon as he changes this, yours becomes obsolete. No matter what high sounding euphonious superlative he attaches to it and even though it appears satisfactory to you, it is an experiment nevertheless. The fact that the manufacturer has discarded it proves this beyond a doubt and you are paying for his experiments.

The simplicity of Meyer transformers, their well balanced design, the almost universal use of same by the doctor and surgeon throughout the country who has to rely on his own resources and the fact that the machines built by us six years ago, have been brought up-to-date at an expense of Fifty Dollars, proves that Meyer machines are superior.

No need of auto control transformers or other camouflage. The radiographic and fluoroscopic results are such as no other manufacturer dare claim.



MEYER NO. 4 TRANSFORMER

This No. 4 apparatus will deliver up to 100 milliamperes at a maximum voltage of 120,000 at the transformer terminals.

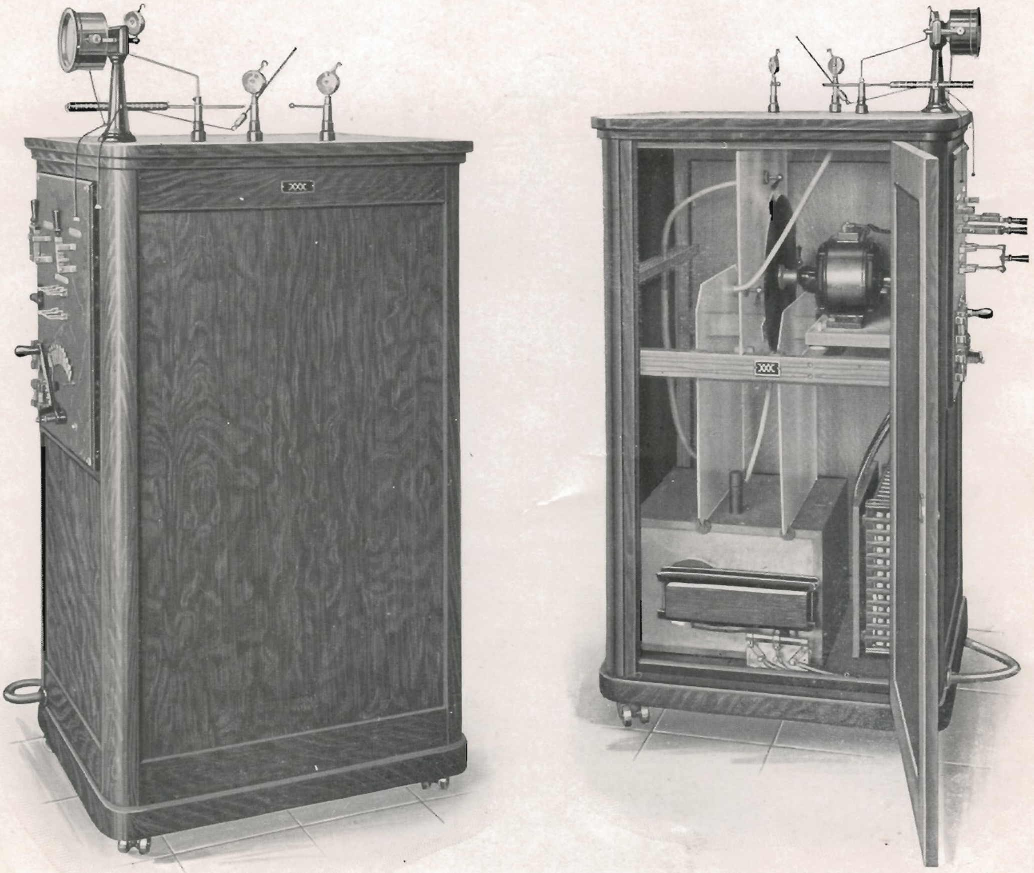
Switchboard is equipped with motor switches, pole changer, radiographic and quick-break X-Ray switch, 15 contact regulating rheostat, polarity indicator, pilot lamp and cartridge fuses for each circuit.

Milliammeter reads 0-10 and 0-100 milliamperes.

Radiography. It will do this work on every part of the body with ease and dispatch.

Fluoroscopy can be done with it, using one to two milliamperes on any subject but stomach and colon work on subjects measuring more than ten inches through abdomen requires three milliamperes.

Treatment requiring from one-half milliampere up can be accurately controlled.



Rear View

MEYER NO. 2 TRANSFORMER

The apparatus is built of the same quality of material as our large machines.

Cabinet Material: Five-ply quarter sawed oak veneer, dark golden oak finish, hand polished, mounted on casters.

Motor: Single synchronous induction type, no troublesome armature windings, commutator or brushes.

High-tension Rectifier: Single disc, two-segment, four breaks.

High-tension Commuting Contacts: Flexible, adjustable, indirect contact with the disc segment holders mounted in plate glass, fireproof.

High-tension Terminals: Graduated 7 inch parallel spark gap, special design of chemical reducer spark gap.

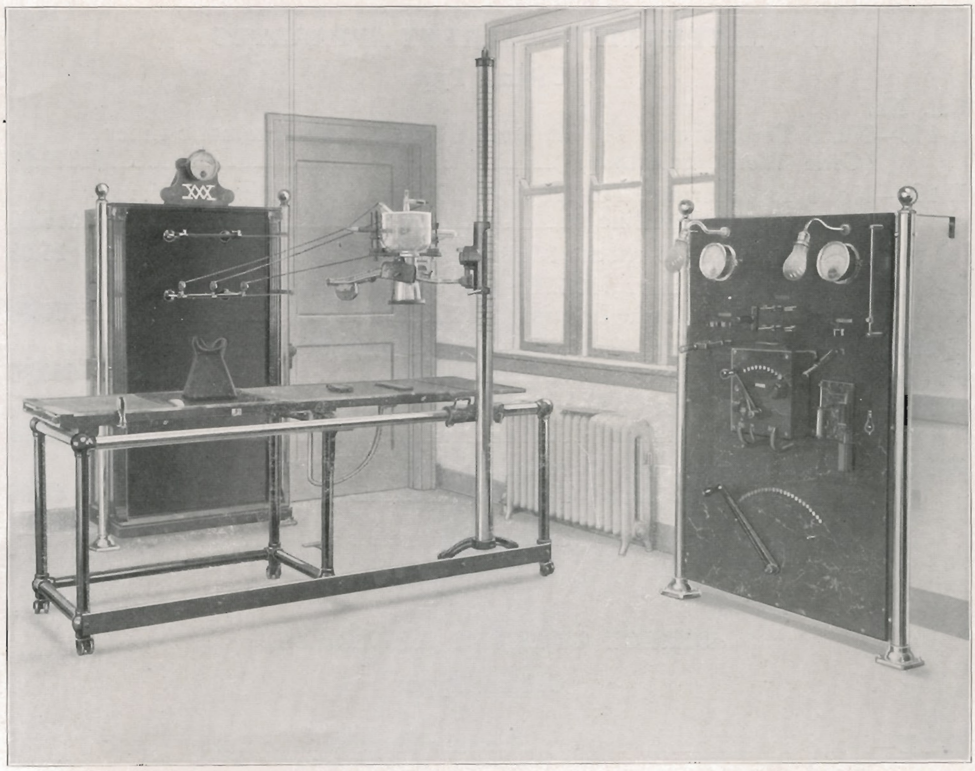
High-tension Transformer: Closed core type, delivers 90 m. a. at 5½ in. Back-up spark. Efficiency 96.8 per cent.

Current Controller: Ten contact, constant duty, series parallel type.

Switchboard: Marbleized, equipped with motor switch, controller lever, pole changer and X-Ray switch.

Milliammeter: Two scale, shunt type, reading 0-10 and 0-100 milliamperes.

Reels: Automatic, 3.



SWITCHBOARD TYPE MEYER INTERRUPTERLESS MACHINE

This equipment is of such size that a special size cabinet must be provided or preferably installed, as shown in the cut above. The high tension terminal board and the power control board are in the X-Ray room proper. The transformer, rectifier, etc., are located in a small room off the main room. This insures absolute quiet, there being not the slightest noise to irritate the patients, and no indication that the X-Ray is being used; the only sound is the click of the circuit-breaker as the power is turned on or off.

The high tension terminal board is black plate glass set in a quarter-sawed oak frame supported by nickeled columns. The power control board is also supported by these columns. All the apparatus is controlled at the power control board, including regulation of the tube vacuum.

A hospital desiring the highest degree of perfection in an X-Ray generator will find this superior to any other.

ESTIMATES WILL BE GIVEN UPON REQUEST.

Price List

ALTERNATING CURRENT APPARATUS

Cabinet Type

Cat. No.		
E-158	No. 8 Transformer, 110-220 volt, 60 cycle with automatic timer (Code Word, Interlude)	$1300.00
E-159	No. 6 Transformer, 110-220 volt, 60 cycle with automatic timer (Code Word, Interline)	1075.00
	Current control in rheostat handle of No. 6 machine, extra	25.00
E-160	No. 4 Transformer, 110-220 volt, 60 cycle without automatic timer (Code Word, Interim)	750.00
E-155	No. 2 Transformer, 220 volt, 60 cycle without automatic timer (Code Word, Simile)	600.00
E-156	No. 2 Transformer, 110 volt, 60 cycle without automatic timer (Code Word, Similar)	650.00
E-161	Automatic time switch complete with batteries for separate mounting, (Code Word, Timwitch)	60.00

All of the above prices include milliammeter and three automatic cord reels.

DIRECT CURRENT APPARATUS

Cabinet Type

E-162	No. 8 Transformer, 110 or 220 volt with automatic timer, (Code Word, Directness)	1600.00
E-163	No. 6 Transformer, 110 or 220 volt with automatic timer, (Code Word, Direction)	1300.00
E-164	No. 4 Transformer, 110 or 220 volt without automatic timer (Code Word, Direct)	900.00
E-165	No. 2 Transformer, 220 volt without automatic timer, (Code Word, Diadem)	730.00
E-166	No. 2 Transformer, 110 volt without automatic timer, (Code Word, Dial)	730.00

Direct current machine switchboards are equipped with automatic starter, pilot lamp, generator start switch, pole changer, radiographic switch, manual X-Ray switch, automatic timer and fuses.

All the above prices include milliammeter and three automatic cord reels. No ammeter is required, if this is wanted, it can be furnished on special order at $25.00.

All the above prices are F. O. B. Chicago.

SHIPPING WEIGHT

	Alternating Current	**Direct Current**
No. 2.	600 ℔s.	700 ℔s.
No. 4.	734 ℔s.	900 ℔s.
No. 6.	1065 ℔s.	1200 ℔s.
No. 8.	1500 ℔s.	1800 ℔s.

LIGHT THERAPY

THE MEYER PARABOLIC PROJECTOR LAMP

Of all the Therapeutic Lamps which have been offered heretofore to the Doctor, none have fulfilled the conditions they were to meet, namely, to give parallel rays, and heat in proportion to the light, as compared to sunlight.

This is due to many causes, among which may be mentioned, incandescent lamps with a high co-efficient of heat per unit of light, faulty design of the reflector, improper position of the lamp in the reflector, lamps giving abundance of red and yellow rays, etc.

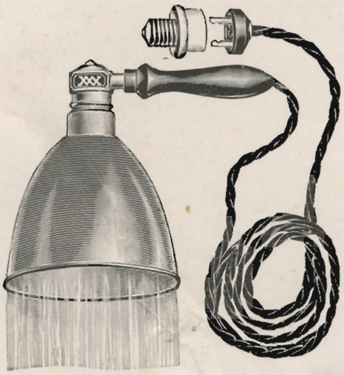
The reflector should be so constructed that the enormous heat developed by carbon filament lamps, may be partly absorbed by the reflector, partly ejected through the apex, by the influx of cold air from below. This will be the most efficient method to keep from blistering the patient. The ventilation will also help to give longer life to the lamp, and the light will be much brighter because of the purer air. Light will travel much faster in fresh air than in air confined and fouled by excessive heat.

It is a well known fact, that **no projector** but the parabolic will give parallel rays and these are absolutely necessary to awaken the sluggish cells to new and vigorous life.

The Meyer lamps are all constructed with this object in view.

Many reflectors are made of brass, nickel or silver plated. Our first samples were made like this, but we soon found that the nickel would tarnish and lose its lustre, while the silver plate changed to black oxide of silver and gave a very dull reflection. Aluminum mangan is the only metal which will retain its polish and lustre under any and all conditions to which a Therapeutic Lamp may be subjected.

PORTABLE THERAPEUTIC LAMPS



No. 1

To be used on any 104-115 direct or alternating current.

50 Candle Power Portable Lamp, complete @..	**$5.00**
Extra Globes, each	**1.50**
Red, Blue or Amber Ray Screens, @	**1.50**

Diameter of Reflector, 5 inches.

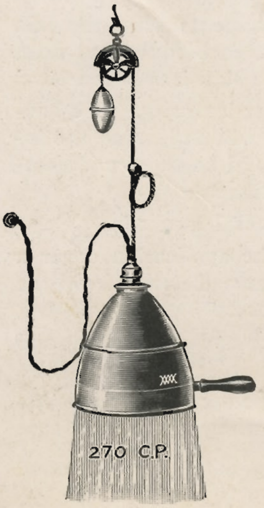
No. 2

100 Candle Power Portable Lamp, complete @.	**$10.00**
Extra Globes, @	**3.00**
Red, Blue, or Amber Ray Screens, @	**3.00**

Diameter of Reflector, 9¼ inches.

These lamps are truly portable, weighing only a few ounces. The reflectors are parabolic and give, therefore, a parallel ray, the nearest approach to sunlight, perfectly white.

Compare the light from these lamps with any other make, and you will be convinced that all the others are not correctly designed.



270 C. P. SUSPENSION
Therapeutic Lamp

No. 3

Price of Lamp, complete, with ball cord adjuster	**$14.75**

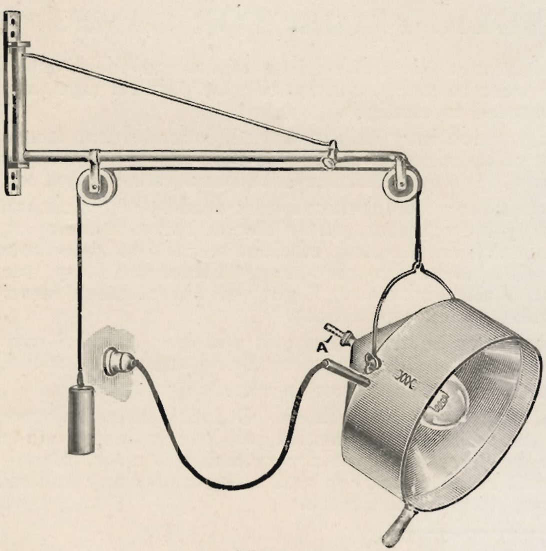
Diameter of Reflector, 10 inches.

To be used on any 104-115-volt direct or alternating current circuit.

Extra Globes, each	**$3.00**
Red, Blue or Amber Ray Screens, @	**3.00**

This Lamp may be attached to an ordinary socket, and does not require any special wiring.

The projector is deep and concentrating, being in fact a regular searchlight.



No. 4
Patented

The Lamp here shown is the most powerful ever built.

The diameter of the hood is 13.5 inches within which fits a large parabolic reflector polished smooth and bright like a mirror.

THE LAMP IS ADJUSTABLY MOUNTED within the hood and the light can be concentrated to a single powerful beam, the intensity and heat of which is felt at a distance of ten feet, or may be diffused over a large area. In spite of this great power the current consumption is only 350 watts.

Naturally it is necessary to construct the reflector of such size and shape that every ray will be projected to such a point on the reflector, where another ray does not cross.

Those to whom the Lamp has been demonstrated state that they have never before seen such a perfect and economical Therapeutic Lamp.

The hood is maroon enameled on the outside and the bracket is nickel plated. The reflector is polished aluminum mangan, which is the only metal to remain brilliantly burnished under the hot rays of this lamp.

Price, complete	$30.00
Price of extra lamps @	3.00
Price of colored screens @	4.00

Directions for Treating with the Therapeutic Lamp

To prevent overheating while applying the "light," brush the hand gently and swiftly over the surface under treatment. The procedure is not disagreeable to the operator and relieves the patient at once of the feeling of excessive warmth and is, therefore, an essential step toward successful results in the treatment.

Apply the light for a short time only during the first few treatments while the skin is sensitive to the heat rays and govern the temperature to suit each individual case.

After the patient has become accustomed to the light and the skin is less sensitive, apply the light for a greater length of time as well as with greater intensity. The condition of the patient and the nature of the disease being treated will determine the intensity and duration of each treatment. The first application should be short and comparatively mild, so that there be no sense of depression or fatigue.

The application of the "light" may be divided into two general methods.

1st. Focalize the light gradually, with a view of making the application cover a considerable length of time at each treatment. Keep the lamp at a distance from the patient and control the heat by brushing the hand over the surface.

2d. Apply the "light" shortly and sharply close to the surface under treatment and make each treatment short.

The first method is adapted to the treatment of chronic and the second to acute diseases. Apply the light vigorously for prompt relief in all cases where there is intense pain and fever.

Abscess: Applying the "chemical rays" of the light relieves pain almost immediately and destroys the pus-forming germs. If an incision is necessary, a few minutes' application will make the incision almost painless, owing to the anodyne effect of the rays. In case of deep abscess, the parts nearest the seat of the abscess should be exposed and the rays applied vigorously if pain is very acute. Time of treatment varies in the individual cases and may best be judged by the operator.

Anemia: The chemical rays will improve the deficient condition of the blood, increasing the red corpuscles, and greatly improving the general condition of the patient. The best results may be obtained in applying the treatment as for chronic diseases.

Appendicitis: If the case is diagnosed early and the light treatment started at once, the disease may be aborted entirely. In advanced stages, it is sometimes possible, if the rays are applied vigorously, to effect a cure without operation.

Asthma: In this disease the light treatment is invaluable if applied during the paroxysm, and if treatment is carried on continuously the best results will be obtained, making the spasms less depressing after awhile.

Bronchitis: This being a conjestion in the lining membrane of the bronchial tubes, it stands to reason that the light treatment will greatly relieve and consequently cure the disease. We all know that a congestion will be cured by the application of heat, and if this heat is applied with our lamp, the chemical rays have an additional advantageous effect.

Carcinoma: The chemical rays having a germ-killing effect, and at the same time enriching the blood by forming new corpuscles, the light treatment is highly beneficial in this disease. It also relieves the often excruciating pains.

Carbuncle: (Refer to "Abscess").

Caries, Vertebrae: This being a germ disease, the chemical rays will prove effective. Place the patient on the side or breast and expose the spine, giving treatment from 15 to 30 minutes, increasing the intensity by bringing the lamp gradually nearer, as the patient can bear the heat. This local treatment may be followed by general treatment in case the patient is weak and emaciated.

Catarrh (Coryza):

Hay Fever: Have the patient recline on his back with his eyes closed and direct the light over the nose and orbital region for from 10 to 15 minutes.

Catarrh (Gastro-Intestinal): Clear the stomach first of indigestible matter and apply the light for from 10 to 15 minutes over the epigastric region. In chronic cases, where the catarrh extends into the intestines, a dose of saline should be given to clear the bowels, and then the entire abdominal region should be rayed over about three times per week.

Colic (Hepatic, Intestinal, Renal): After removing the clothing over the seat of the pain, place the patient in a recumbent position and apply the light vigorously.

Cystysis: Apply the light over the pubic region for 15 to 30 minutes per day, or if the case is urgent, oftener. Apply less frequent in chronic cases, but of longer duration.

Diabetes: Great improvements may be obtained by a general application of the light.

Eczema: By making short, sharp treatments of from 1 to 2 minutes or less, continued at 2-minute intervals for about 15 to 30 minutes, even severe cases are relieved of itching and pain and the surface will heal as the microbes are destroyed.

Epithelioma: Protect the surrounding healthy tissues with several layers of asbestos paper and then anesthetize the diseased surface with cocaine solution. Bring the focused ray to bear on the tumor within an inch or two until the complete destruction of the diseased tissues has taken place. The slough will come away in a few days, leaving a granulating surface that will heal readily.

Gall Stones: In gall stones colic apply the light over the region of the gall bladder. The pain will be quickly relieved and congestion removed.

Gastralgia: The surface over the epigastric region should be bared and the lamp brought as near as the patient can endure, eliminating the heat waves by brushing the hand over the surface. The congested nerve centers will soon be relieved.

Goiter (Exophthalmic): After giving attention to such causes as retained toxins in the intestinal tract, by using laxatives (saline preferably) bring the light to bear over the entire abdominal region for from 15 to 25 minutes. Next place a covering of asbestos over the tissues surrounding the goiter and direct the focused beam to the tumor, bringing the lamp quite close. Repeat this several times, with two-minute intervals during each treatment, treating every day at first; reduce gradually.

Grippe (Influenza): Focus the light over the chest, throat and nose for 10 to 20 minutes once or oftener daily.

Hip-Joint Disease: Apply the light for 30 to 40 minutes to the diseased area, also down the thigh to the knee and up the spine if there is any tenderness.

Inflammation: Apply the light vigorously over the involved area and the inflammation will soon subside. The light will destroy the sepsis-producing germs and promote absorption.

Intercostal Neuralgia: Place the patient on the unaffected side and direct the light on the painful area, giving short, sharp treatments of from 30 to 45 seconds. Remove the lamp somewhat farther and continue for a longer time until relief is secured.

Kidney Disease: The light may be applied from 20 minutes to one hour if the case is chronic, over the lumbar region, keeping the lamp at a distance comfortable to the patient.

Larynx (Tuberculosis of): With the light at a distance comfortable to the patient, let it play on the throat and down below the clavicular line to the chest, for from 20 to 30 minutes, once or twice daily.

Laryngitis: This being usually acute, treat as above described, except bringing the light closer and interrupting when the heat becomes too strong.

Liver: Abscesses or congestion may be treated by applying the light over the hepatic region for 10 to 30 minutes daily until improvement takes place.

Locomotor Ataxia: Apply the light the entire length of the spine downward up to the coccyx and repeat. In this usually intractable malady regularity and persistence are necessary if any benefits are to be secured.

Lumbago: Prompt relief can be given in this condition by applying the light over the affected region. Uric acid and other toxins retained in the local tissues being relieved.

Lymph Glands (Tubercular): If the light is applied while these are in the incipient state, the swelling will be reduced and the germs destroyed.

Malarial Toxemia: Morton advises the use of quinine in small doses, so that when the general light treatment is given the blood will be saturated for its fluorescent effects.

Migraine: The intestines should be cleaned out by internal medicine, followed by a saline. Apply the light to the seat of the pain until the distressing headache is somewhat relieved. Then apply the light to the spine daily until the paroxysms occur no longer.

Myalgia (Muscular Rheumatism): By stimulating the lymphatic glands, relieving congestion and thereby equalizing the circulation, a cure may be quickly effected.

Neuritis: Neuritis may be caused by local injury, exposure to cold, inflammation, or poisonous matter in the blood, or by infectious diseases. In case of simple neuritis, apply the light over the system of the nerves affected, and in case of multiple neuritis, also along the spine. Treatment should be given daily, decreasing as the case improves.

Nephritis (Acute and Chronic): Applying the light sharply over the lumbar region will open up the circulation, relieve the congestion and restore a normal condition in the kidneys.

In acute cases repeat the treatment several times a day until the inflammation has been reduced, and the urine tests normal. In the chronic form general treatment should be given.

Neuralgia: Short and sharp applications generally afford prompt relief.

Neurasthenia: Daily application should be made from above downward along the spine. The general superficial of the body may also be rayed; besides this, general high frequency treatment is recommended.

Ovarian Diseases: The application of the light will quickly reduce neuralgia and inflammation of the ovaries. Applying the rays over the seat of pain, during and preceding menstruation, will give prompt relief. In case abscess is suspected apply the rays for the distribution of the pus-microbes, and the removal of the abnormal deposits.

Paralysis: The rays are to be applied along the spine, also directly over the part affected, and over the chest and abdomen, for a general effect.

Peritonitis: By a close, sharp application of the light over the abdominal region, as close as the patient can bear, the inflammation will be promptly reduced in acute cases. In chronic cases the rules laid down for chronic cases should be followed.

Phthisis: A general application of the light, lasting from 30 to 50 minutes, with the clothing removed to the waist, should be given, while the patient rests in a reclining position, every day.

Pleurisy (Acute and Chronic): In acute affection the pain will be promptly relieved, while in chronic cases, unless adhesion has already occurred, absorption will be promoted.

Rheumatism: Rheumatic pains can be promptly relieved by the light. Applications of the light along the hip and thigh, bringing the light quite close for a few minutes, will relieve the congestion below the superficial tissues, subdue the pain, and will be very beneficial and soothing.

Spleen (Enlarged): The action of the rays in withdrawing large quantities of blood from the organ; assure a successful treatment.

MEYER MULTOSCOPE

The Multoscope described in the attached bulletin is so different in its manifold application from any other apparatus offered, for a similar purpose, that like other Meyer X-Ray Apparatus, it bears the stamp of originality.

To this has been added as shown on the opposite page, two more original features, a Self-Contained Aerial and a High Tension Switch to switch the current between the fluoroscopic tube and radiographic tube as may be desired.

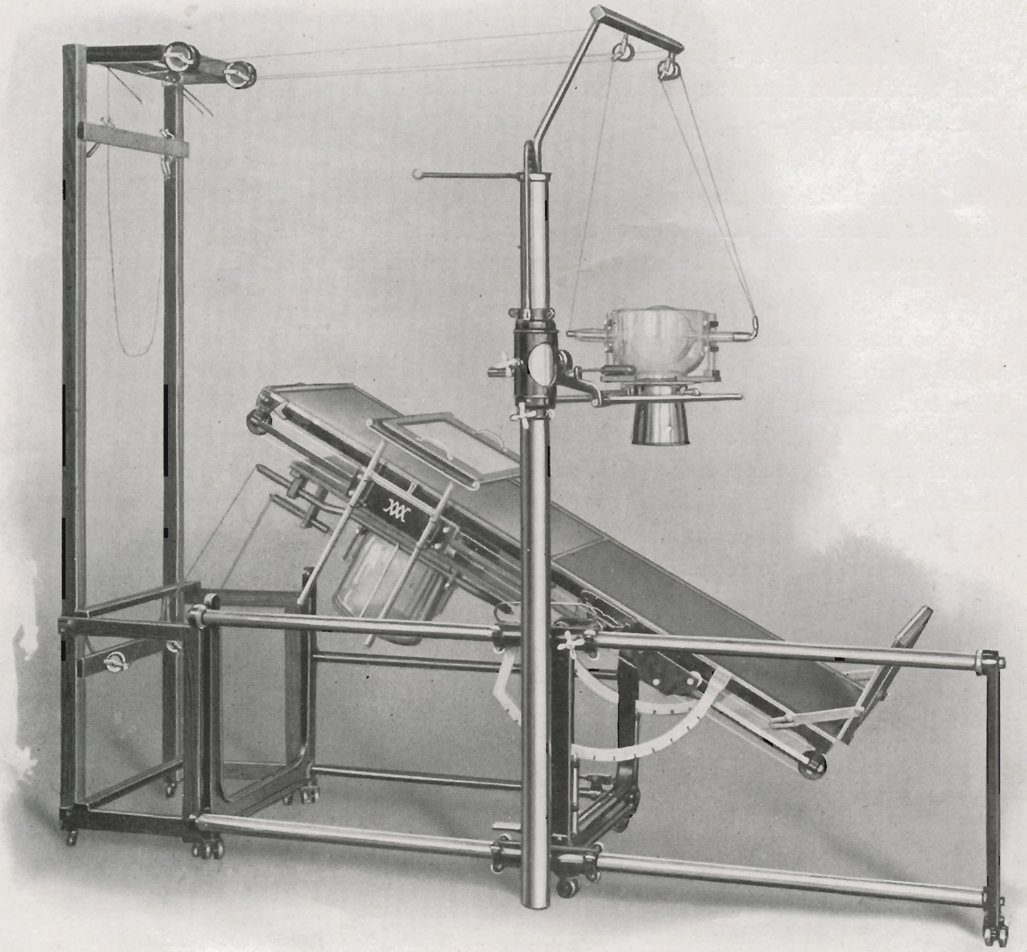
No longer is the X-Ray operator compelled to string up the room with unsightly wires absorbing a large percentage of the energy of the generator like the aerial of a wireless station, or punch holes in a ceiling to anchor a high tension switch, for this Self-Contained Aerial with High Tension Switch, at the top of the tower takes care of this. The reels carrying the conductors from the tower to the cross arm over the tube stand are of large size to carry the horizontal aerial conductors and keep the wires taut whether the tube stand be at one end or the other.

The short arm projecting out from the tube stand is intended to hold the positive conductor when the tube holder is swung out away from the table to radiograph patients brought in on a cart.

Security of insulation has not been overlooked and the possession of this apparatus stamps any X-Ray equipment as the acme of completeness.

No. E—173 Price including six inch cone for tube stand and 11x14 fluoroscopic screen, protected with lead glass and lead protected frame, aerial wiring and switch fitted for both ordinary and Coolidge tube, f. o. b. Chicago (Code Word **Mulaerial)** -- $1100.00

(Note—X-Ray Tubes are not included)

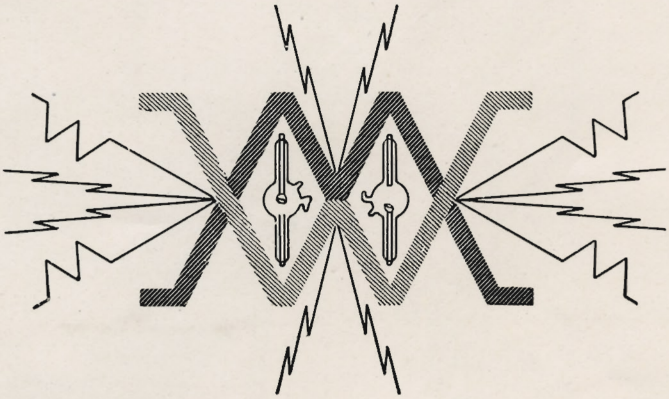


MEYER MULTOSCOPE WITH SELF-CONTAINED AERIAL AND HIGH TENSION SWITCH

MEYER MULTOSCOPE

A Combination Stereo-Radiographic Table and Klinoscope

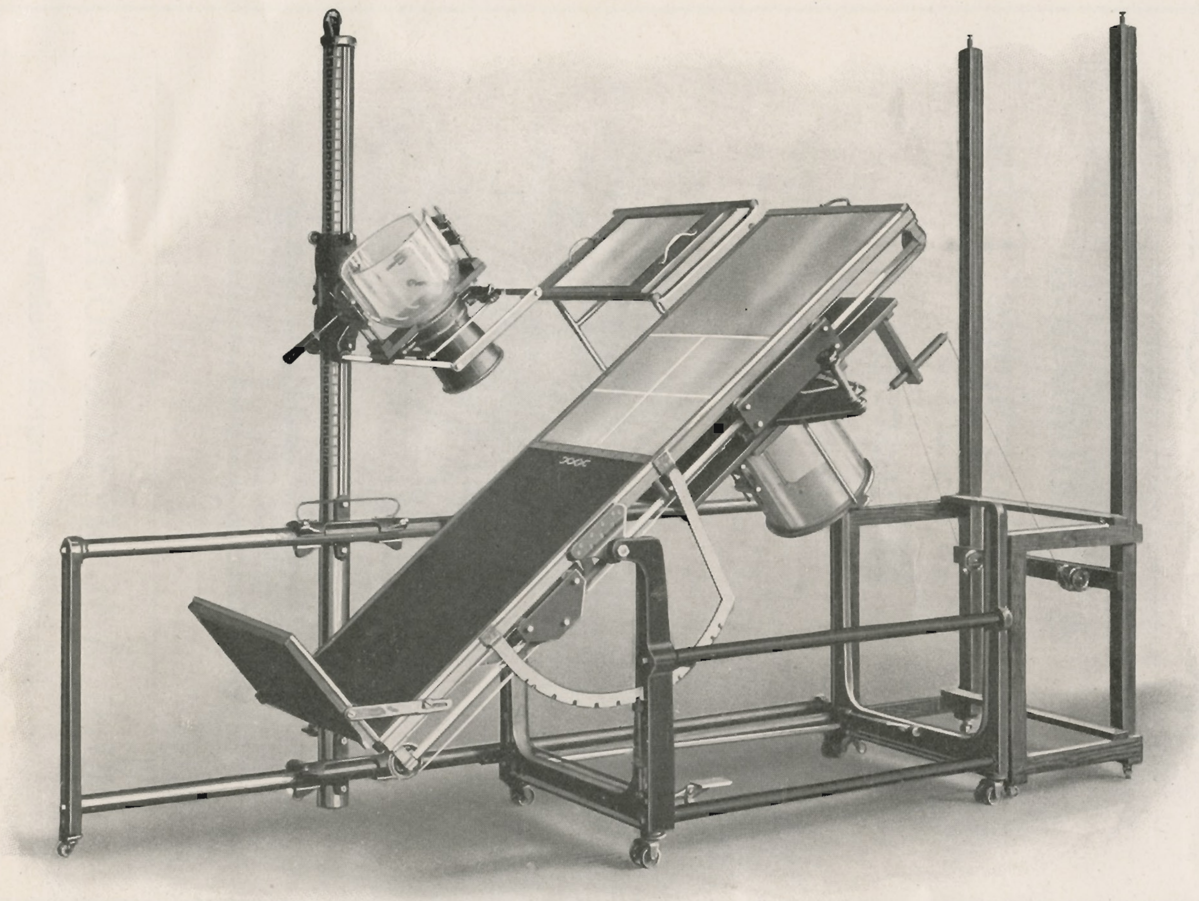
Patents Pending



NOTE:- Illustrations are not binding as to detail, in view of improvements.

Prices subject to change without notice.

THE WM. MEYER COMPANY
825 West Washington Boulevard
CHICAGO, ILL.



MEYER MULTOSCOPE

MEYER MULTOSCOPE

A Combination Stereo-Radiographic Table
and
Klinoscope

This apparatus offers today greater simplicity and convenience of operation than any other similar one now on the market, is therefore more efficient and its many exclusive features, the subject of patent application, will prove it to be a distinct advance.

No other table is so well counter-balanced that it can be shifted from vertical to horizontal position or vice versa, without requiring a motor and drive or at least a hand crank, with consequent slowness of operation and no other combination apparatus has such a large area for fluoroscopy.

No other tube stand designed for stereo-radiography, admits of doing X-Ray treatment work at a distance of six and one-half inches like this one does, and no other tube stand admits of all the desirable positions for radiographic work like this one.

It is ready for stereo-radiography at any height without a lot of tedious adjustments, pulling a trigger does the work.

The plate changer works smoothly in the horizontal or vertical or angular position, all movement controlled by adjustable air valves.

The fluoroscopic screen holder is ingeniously supported at one side, the longitudinal movement being in unison with the tube, while the cross movement is made independent. When not required, the screen with support can be removed in a few seconds.

The tube covering for the fluoroscopic tube is a distinct feature being lead glass, more than twice the thickness of the lead glass used for tube bowls.

After considerable experimenting and comparing, we decided that the ordinary wood box with thin sheet lead or X-Ray proof rubber covering was hardly fit for use with the Coolidge tube and left the operator exposed to a considerable extent to the rays. Furthermore, it was not sufficiently insulated to admit of a high potential at the terminals of the tube without short circuiting through the lead covering.

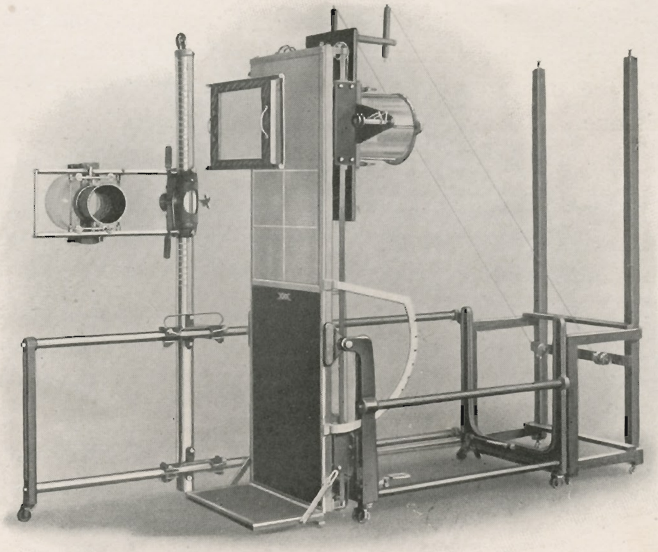
The openings or slots in the glass shield are covered with H shaped X-Ray proof rubber blocks through which the terminals of the tube only project.

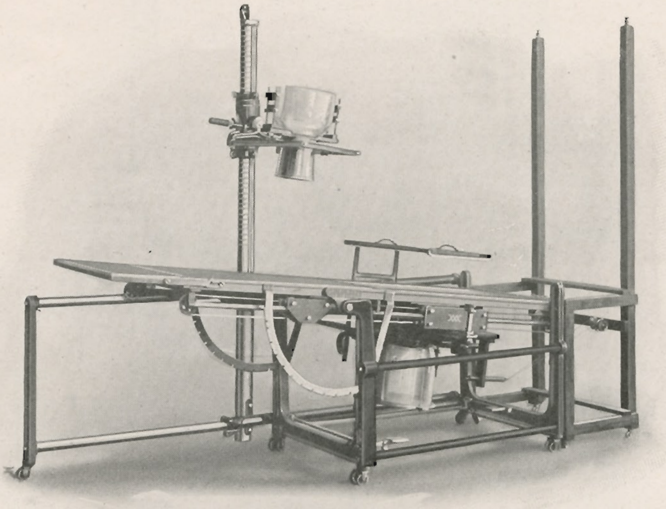
The lead glass bowl is covered with an opaque hood which fits tightly and excludes all light.

The ordinary tube or the Coolidge tube can be used in this container with equal success and a lot of ponderous bulk and weight is eliminated. Sufficient angular positions between the vertical and horizontal are provided for.

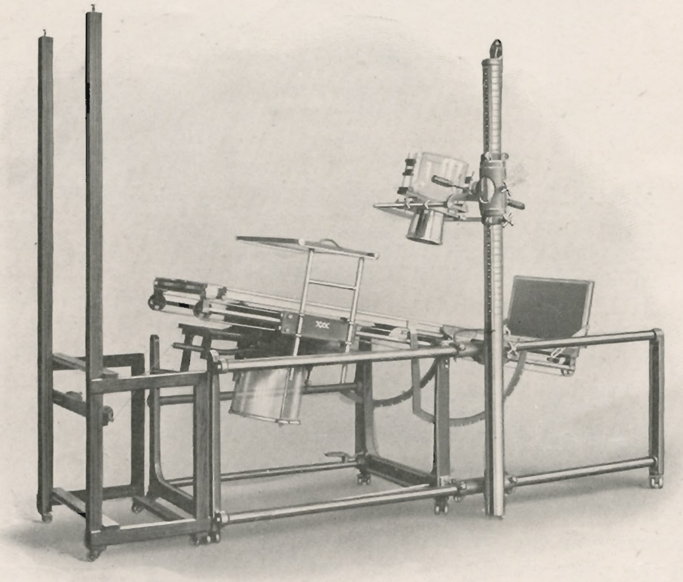
It has required nearly three years to perfect this table, most of the material being of special design and every step in the construction being scrutinized from all angles.

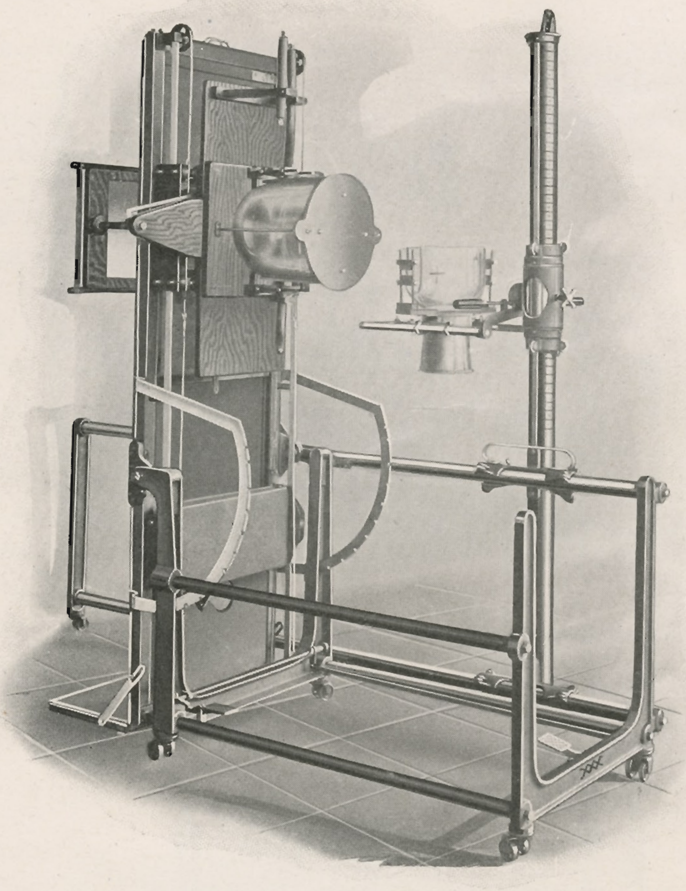
The result is an apparatus which will become a standard like the Meyer Transformer and the Meyer Klinoscope.





TRENDELLENBERG POSITION





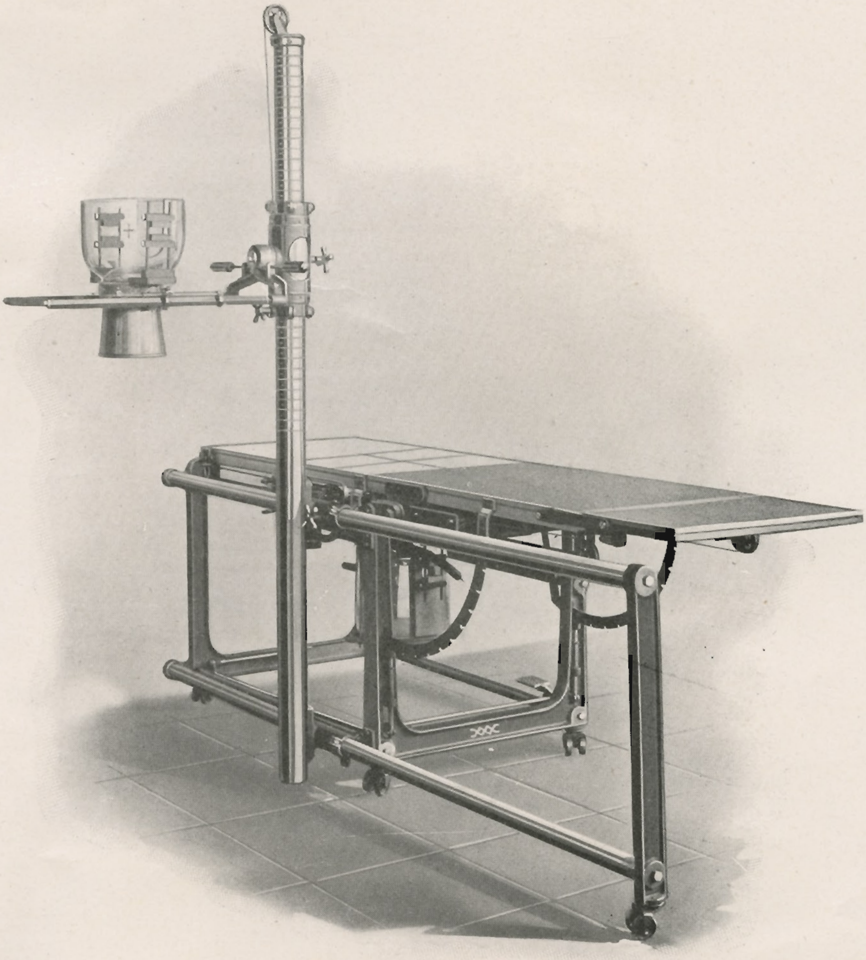
No. E-130	Meyer Multoscope complete with reels, arranged for Coolidge tube with fluoroscopic screen 11x14 inches, with double plate changer but no cassettes, (Code Word, Multo)	$1000.00
	If interlocking 17x17 Cassettes are wanted add	45.00
	If 12x16 screen is required, add and remit with the order	25.00
	If no fluoroscopic screen holder nor screen is desired deduct	75.00
	As stereo-radiographic table only with tube stand but not fitted as radioscope, tube stand including 6″ cone	500.00
	All standard cones in our list for No. 5 and No. 7 stands will fit.	
	All treatment cones and compression cones for No. 6 and No. 8 stands will fit with adapter.	

We recommend the special thin aluminum cassettes which can be clamped to the plate changer.

Price per pair—11x14	22.00
" " " 14x17	33.00

Shipping Weight—Domestic, 1300 pounds, Export, 1600 pounds.

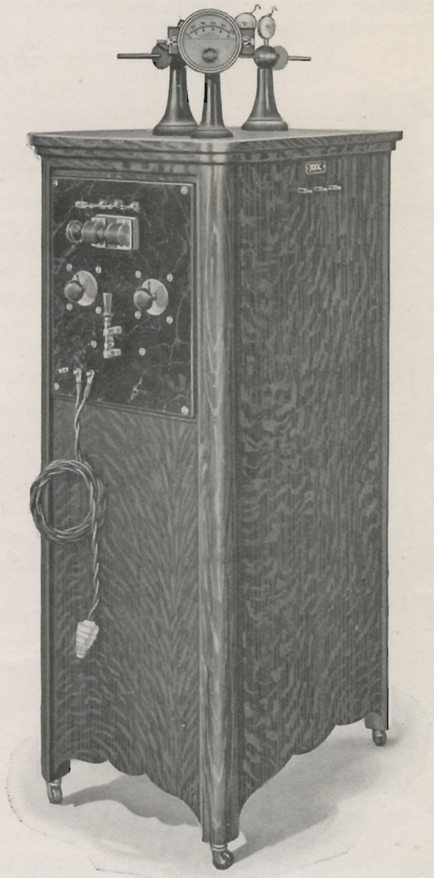
All prices are f. o. b. Chicago.



AS A RADIOGRAPHIC TABLE WITH TUBE HOLDER SWUNG OUT TO RADIOGRAPH PATIENT ON STRETCHER IN PLACE OF TABLE.

MEYER TYPE "E" APPARATUS

Delivers X-Ray, High Frequency, Auto-
Condensation and Diatherma



A SPECIAL FEATURE OF OUR APPARATUS

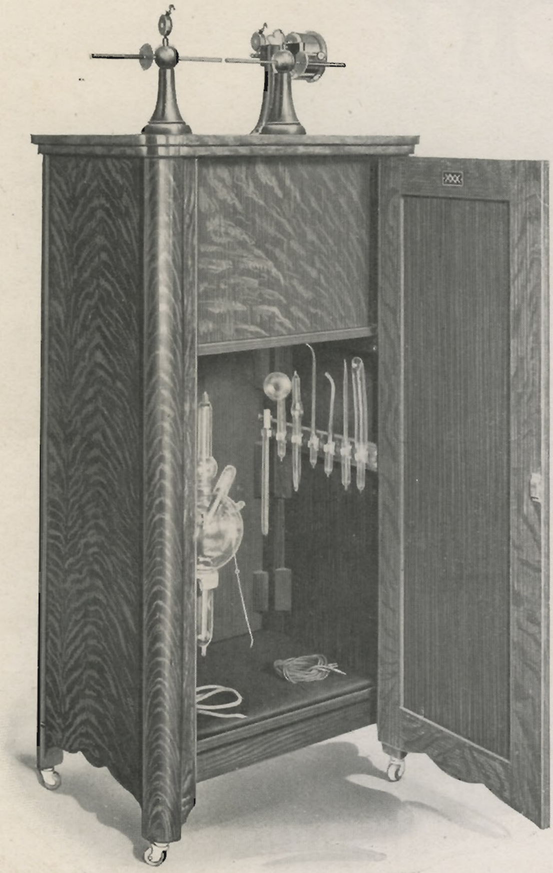
is that the D'Arsonval current as well as the diathermic current coils are separate from the high tension high frequency coils, on entirely separate circuits. They are air cooled, not imbedded in wax, not merely tapped windings, which is a cheap method used by other manufacturers. Such coils with tapped windings, have neither the correct wave form nor voltage. Every time such apparatus is used for D'Arsonvalization, the high tension coils are subjected to unnecessary stress which presages a break-down.

With our coil the correct current and voltage are obtained and being air cooled, away from the high tension coils, all break-down trouble is avoided.

X-Rays—With intensifying screen will make splendid hip picture of 180 lb. man 18 inches, in 15 seconds. Hand, wrist, etc., in single flash of about one-sixth second.

Milliammeter—This machine is the **Only One** of all those made, which has a milliammeter to indicate the current passing through the X-ray tube. Range of meter 0 to 15 milliamperes. From 5 to 10 milliamperes may be put through a tube with this machine.

The milliammeter is not a hot wire instrument but is of the D'Arsonval type. Since we have brought out this meter, improvements in the X-ray tubes used with this type of machine may be looked for.



High Frequency—Delivers all the High Frequency currents, including Auto-Condensation and Diatherma in correct form and full volume required for heaviest dosage, as per latest technique.

Auto-Condensation — The value of Auto-Condensation for the reduction of high blood pressure and in the treatment of diabetes, myocarditis, etc. is well known.

From 300 to 900 milliamperes are required. Results cannot be expected from an outfit giving only 50 to 300 milliamperes.

Diatherma—By means of this remarkable current heat and hyperemia are produced at will in a localized area of any internal tissues desired without overheating the skin.

It is used with highly satisfactory results in urethritis, acute and subacute arthritis, synovitis, neuritis, neuralgia, pancreatitis, and other conditions where heat and hyperemia is indicated, not only to relieve pain, but to promote restoration to a healthy condition.

Easy to Operate—A feature of all our apparatus is simplicity of operation and perfect regulation from minimum to maximum.

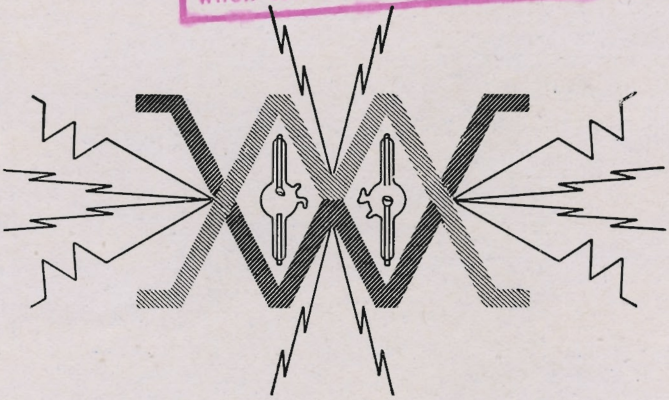
Size—60″ high, 28″ wide, 19½″ deep, 11″ center to center of balls. Select quarter-sawed oak, rich dark golden piano finish. Metal parts nickel.

Shipping Weight—225 pounds.

No. D-2045.	Type E, machine to operate from the 104-125 volt 60 cycle alternating current including 8 ft. double connecting cord, 1, 6 ft. cord for high frequency electrode, 1 body electrode, 1 high frequency handle, 2 auto-condensation cords, 2, 6 ft. tape reels, 1, X-ray milliammeter (Code Word—Hydrant)	**$300.00**
No. D-2046.	Price of Auto-Condensation milliammeter, hot wire type 50-1200 milliamperes (Code Word—Hot wire)	**30.00**
	For D. C. Rotary converter Add	**100.00**
	For omitting Auto-Condensation and Diatherma deduct	**20.00**

X-RAY ACCESSORIES

Prices not guaranteed on account of unsteady cost of materials. Articles will be billed at lowest market prices when order is filled.

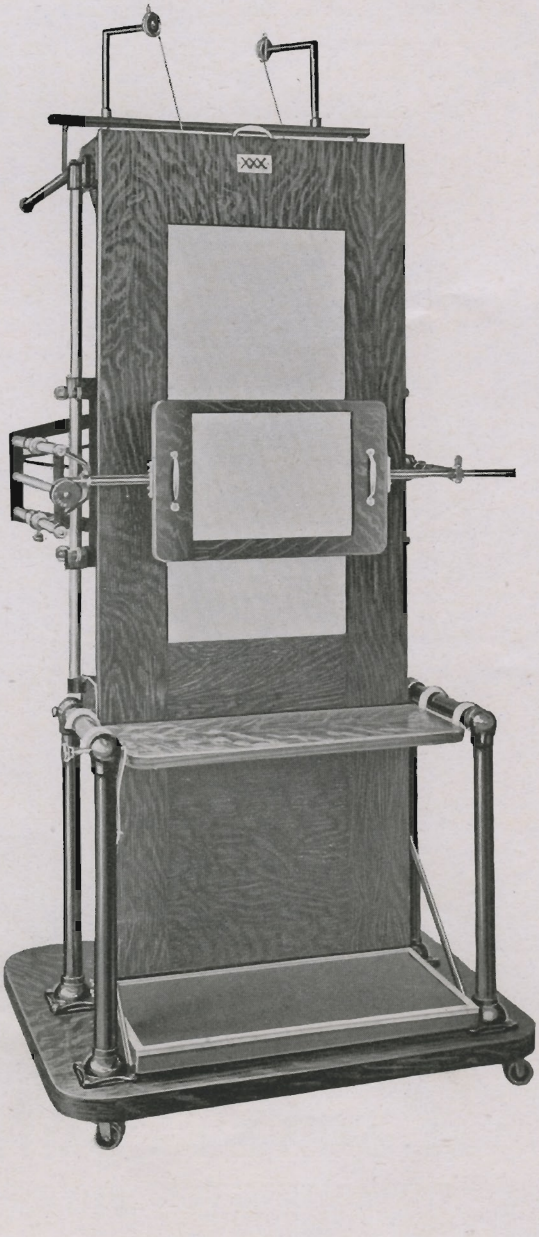


NOTE:—Illustrations are not binding as to detail, in view of improvements.

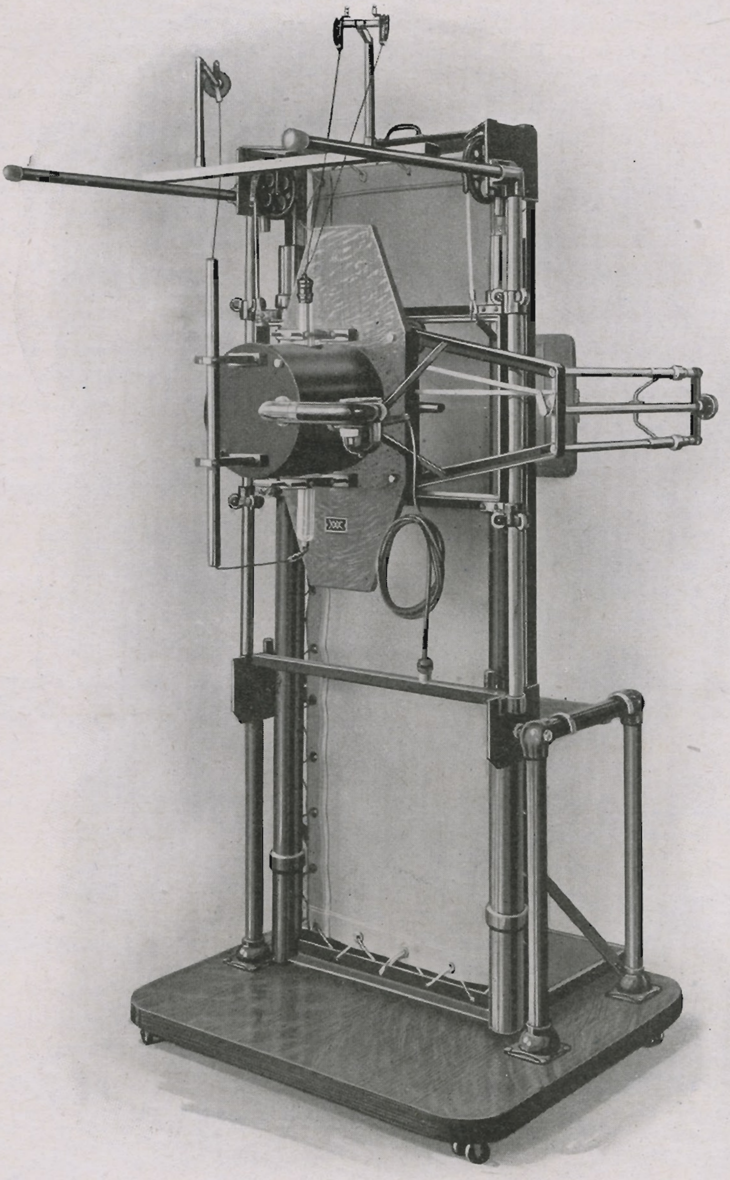
Prices subject to change without notice.

THE WM. MEYER COMPANY
825 W. WASHINGTON BLVD.
CHICAGO, ILL.

MEYER UNIVERSAL KLINOSCOPE



MEYER UNIVERSAL KLINOSCOPE



MEYER UNIVERSAL KLINOSCOPE

As its name states and the illustrations show, this apparatus may be used for fluoroscopy in the vertical as well as the horizontal position. It may also be used for radiography by placing a plate and plate holder in back of the fluorescent screen. A stout canvas screen is laced into a steel frame and drawn tight as a drum. This canvas forms a most satisfactory support for the patient whether in the upright or horizontal posture, compared to chilly metal used in some radioscopes.

With the exception of this and the base and seat, all the parts are metal, securely riveted, bolted and welded together. The fluoroscopic screen is most rigidly supported by means of steel rods from both sides, and since it turns well in any desired direction, it will remain in such position and not swing about like the screens of some radioscopes.

PROTECTION.

In no other device on the market has such care been given to the protection of the operator.

Whether the supporting screen for the patient be canvas, wood and aluminum or celluloid, both patient and operator have ample protection, the rays from the tube passing through an aluminum filter before striking the patient. After passing through the patient, those rays which are not absorbed by the fluorescent screen will be cut off by the lead glass covering.

Where the Coolidge tube is to be used, the protective shield surrounding the tube is all lead and in this form is ideal for the Coolidge tube, which offers the best solution of continued fluoroscopy.

We can also furnish the large lead-covered box to take the X-ray tube in entirely, where this appears desirable or the ordinary tube is to be used for fluoroscopy. (See Page 6.)

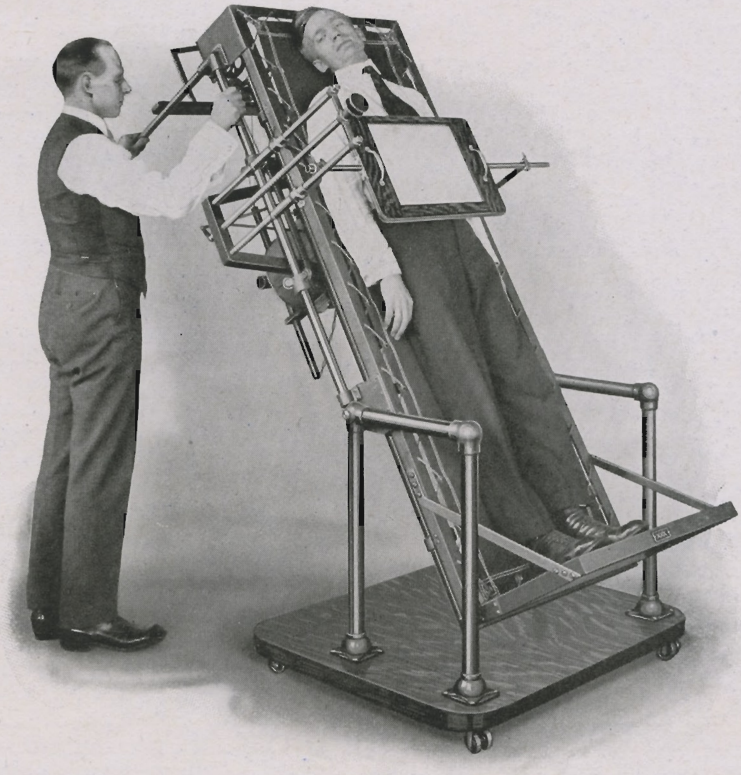
We are now furnishing also a lead glass shield, twice the size and thickness of the regular glass shield used for the tube stand, covered with an X-ray protective rubber hood to shut out the fluorescence of the tube. This method, doing away with the lead-covered box, makes the Coolidge tube available for fluoroscopy and radiography, all while the patient is being examined and without changing position. No other apparatus is capable of doing this. Therefore this is the ideal apparatus for the specialist.

Vertical and horizontal movement is on ball bearing rolls and sheaves, giving ease of movement not found elsewhere.

The control of the diaphragm is by the hard rubber knobs at the end of the rods which support the screen holder and the ease with which these operate, besides being convenient to the operator's left hand, is also a great advance over those obsolete types that require a set of eight-inch levers to operate them.

The standard fluorescent screen is 11x14 and is protected with imported lead glass, mounted in a lead protected frame.

Combining the two radioscopes for vertical as well as horizontal work into one, is a material saving in room and apparatus. The cost is also reduced by several hundred dollars, while the actual usefulness is increased immensely.

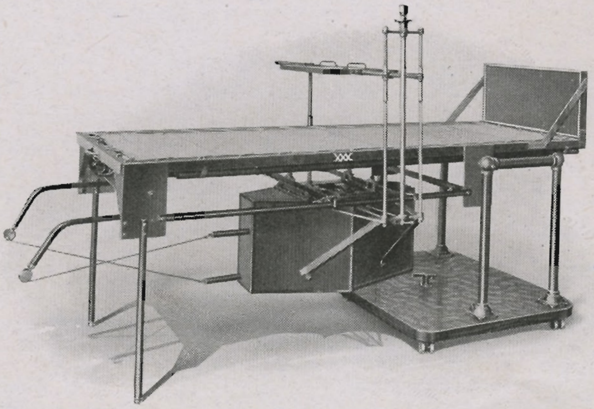


The change from the vertical to the horizontal may be made while the patient remains in position on the canvas screen. If a wood and aluminum screen were used this would not be so easily accomplished because of the slippery, unyielding surface, which does not adapt itself to the contour of the body. The large counterweight on which the patient stands serves as a counterbalance, so that the change from vertical to horizontal position with the patient can be accomplished easily.

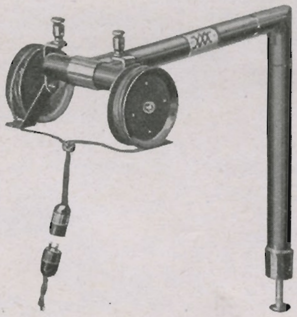
If desired we can furnish a wood and aluminum covering in place of the canvas, but on special order only.

For continuous operation of a Coolidge tube, the addition of a small air blower is recommended and we furnish the Klinoscope ready to attach such, price **$25.00.**

State if for Coolidge or ordinary tube.



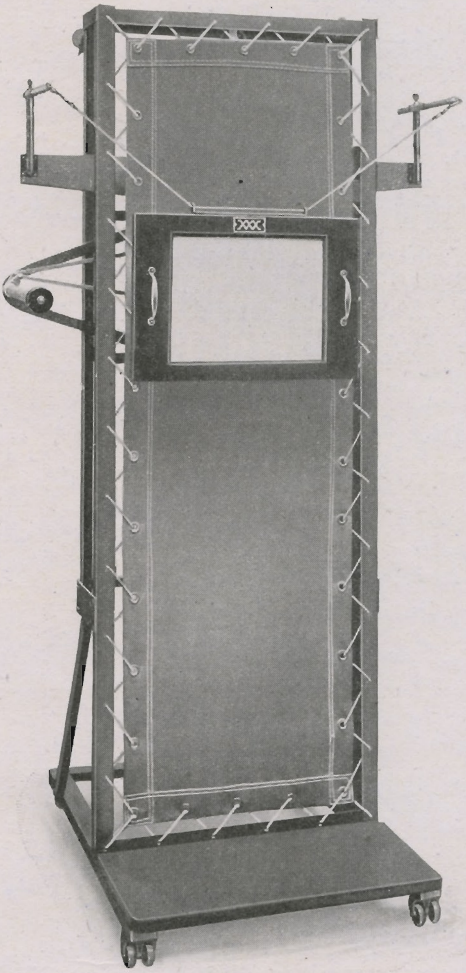
No. E-1.	Universal Klinoscope with Canvas Top, complete with 11x14" screen, seat and automatic reels. (Code Word, scope.)	
	Fitted for Gas tube	**$475.00**
	Fitted for Coolidge tube	**485.00**
No. E-2.	Universal Klinoscope with Oak and Aluminum Top, complete with 11x14" screen, seat and automatic reels. (Code Word, Okalum.)	
	Fitted for Gas tube	**490.00**
	Fitted for Coolidge tube	**500.00**
No. E-3.	Universal Klinoscope with Oak and Celluloid Top, complete with 11x14" screen, seat and automatic reels. (Code Word, Oakoid.)	
	Fitted for Gas tube	**500.00**
	Fitted for Coolidge tube	**510.00**
	If a 12x16" screen is desired instead of the 11x14", add $15.00 to the above prices.	
	Small Air blower Extra	**25.00**
	Shipping weight, 1,100 lbs.	



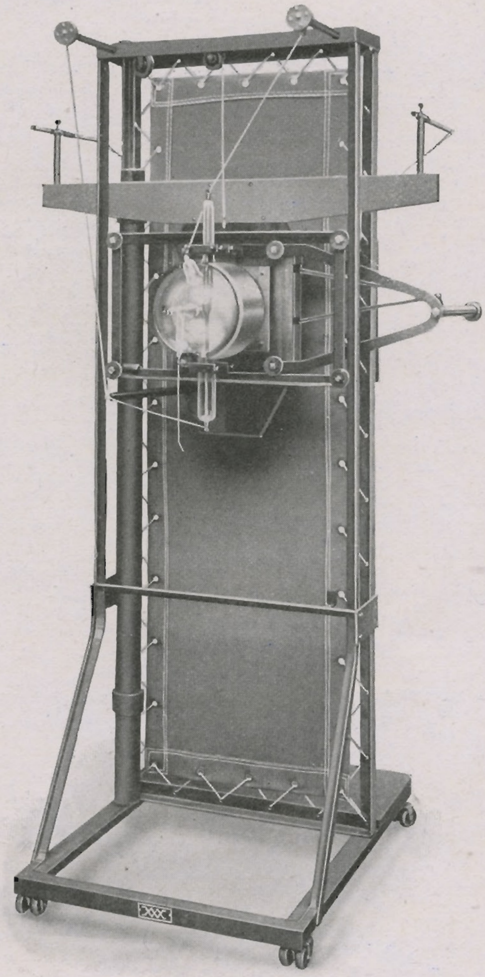
Double reels for Coolidge tube attachment on klinoscope.

No. E-4. Price complete as shown **$10.00**
(Code Word, Duplex.)

MEYER VERTICAL RADIOSCOPE



Front View



Rear View—Shown Without Tube Hood

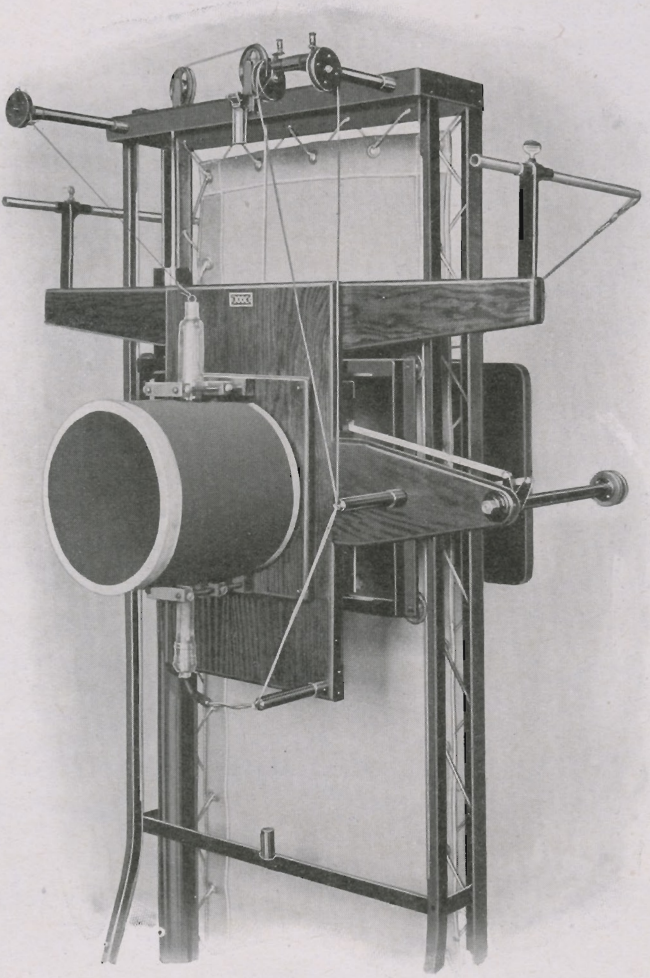
Frame: Steel welded and riveted together, mounted on casters. Will not warp like those made of wood.

Patient's Support: Oak platform and canvas laced in steel frame. No chill metal or cold wood to shock patient.

X-Ray Protection: Tube mounted in lead glass shield, this mounted against lead plate 14x24, giving full protection to the operator.

Shutter: Double slit type, independent adjustment, covered with aluminum filter. When you have handled those that need an 8-inch lever to move, you will enjoy this.

Movement: All movement, vertical as well as horizontal, is made by moving the fluorescent screen. Case hardened ball bearing steel rolls operate on steel guides.



Rear View—Showing Opaque Hood

Fluorescent Screen: W. M. type. Has nearly double the definition of a Platino Barium Cyanide screen. Does not deteriorate like it either. Size 11x14", covered with lead glass. Frame protected with sheet lead.

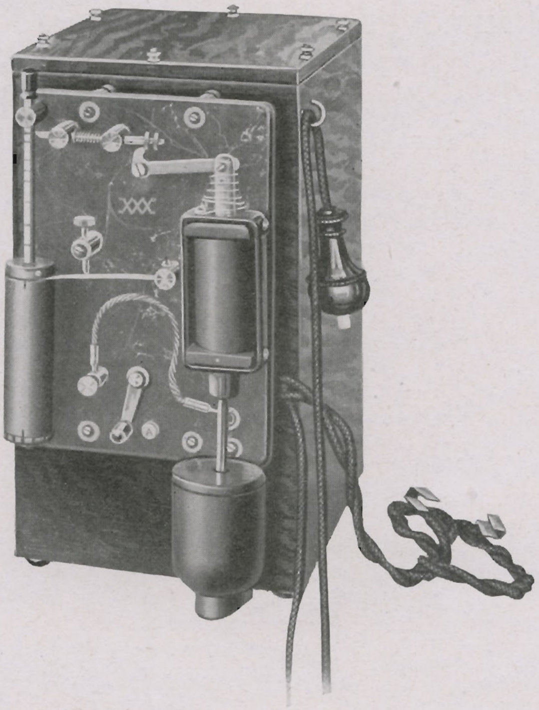
Automatic Reels: Two are furnished, mounted at the top of the frame, to conduct the current to the X-ray tube. When desired the radioscope can be fitted with an extra reel for the Coolidge tube. Cost of fitting, extra.

Opacity: The lead glass shield containing the tube is covered with a perfect opaque covering so that no light escapes to disturb the operator, and is also an additional protection against the X-ray.

Finish: Black enamel. Special colors, **$15.00** extra.

No. E-5.	Vertical Radioscope with Canvas, complete with 11x14" lead glass covered screen. (Code Word, Radial).	
	Fitted for Gas tube	**$325.00**
	Fitted for Coolidge tube	**335.00**
No. E-6.	Vertical Radioscope with Oak and Aluminum, complete with 11x14" lead glass covered screen. (Code Word, Radiate.)	
	Fitted for Gas tube	**$340.00**
	Fitted for Coolidge tube	**350.00**
	If a 12x16" screen is desired instead of the 11x14", add $15.00 to the above prices.	
	Shipping weight, 350 lbs.	

AUTOMATIC TIME SWITCH



This important device for the correct timing of short exposures was the first to have a non-sticking contact and is today the most efficient and compact. Its special features are being fully covered by patents. There are no flimsy clock-works or inaccessible parts hidden within a box, all parts being easily accessible to inspection. It is beautifully finished.

No. E-7. Automatic time switch complete with batteries for separate mounting (Code Word, Timwitch.) .... $ 60.00

REELS.

No. E-8 Automatic tape reel, 6 foot, with tip only. (Code Word, Relax)...$1.25

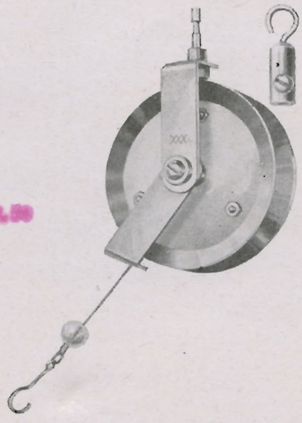
VOID.

No. E-9. Cord reel, 8 foot with tip only. (Code Word, Reeve) 3.00

No. E-10. Cord reel, 8 foot with tip only. For Coolidge tube cord. (Code Word, Redan).. 3.25

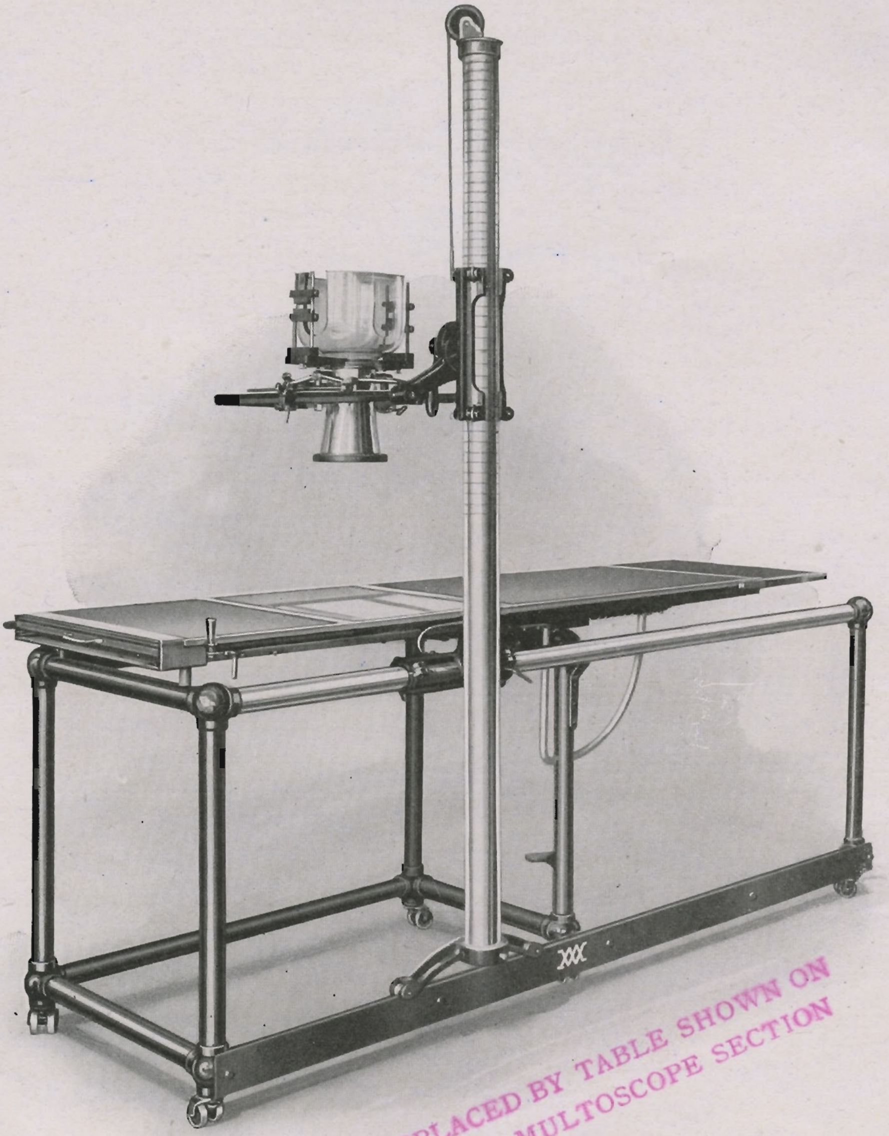
Swivel for either of the above, for aerial, 25 cents extra.

Tape Reel



Cord Reel and Swivel

MEYER IMPROVED STEREOSCOPIC RADIOGRAPHIC TABLE AND TUBE HOLDER



REPLACED BY TABLE SHOWN ON
PAGE 7 MULTOSCOPE SECTION

Stereoscopic radiography is greatly simplified by our methods as embodied in this table. Practically all the preliminary adjustments and trials required with other tables are eliminated. No other tube holder possesses such facilities for quick work at any desired point. There is no consulting of tables to find how many degrees you have to adjust the tube holder to get the correct stereoscopic effect.

Just set the tube carriage to the height and position desired, compress the spring and after making the first exposure, pull the trigger.

The Advantages of this Apparatus then Are:

Table and tube stand one unit, requiring no floor guide or track to keep in proper position.

Tube carriage may be swung away from table, thus giving all the facilities of a separate tube stand.

No separate vertical plate changer required as the table comes to the vertical position (or any angular position as well).

Stereoscopic Radiography in Either Horizontal or Vertical Position.

Plate changer slides into second position without jar.

Ball and roller bearings give easy adjustment.

Tube carriage balances, i. e., the glass bowl will not turn turtle when locking screws are loosened, your tube is always safe.

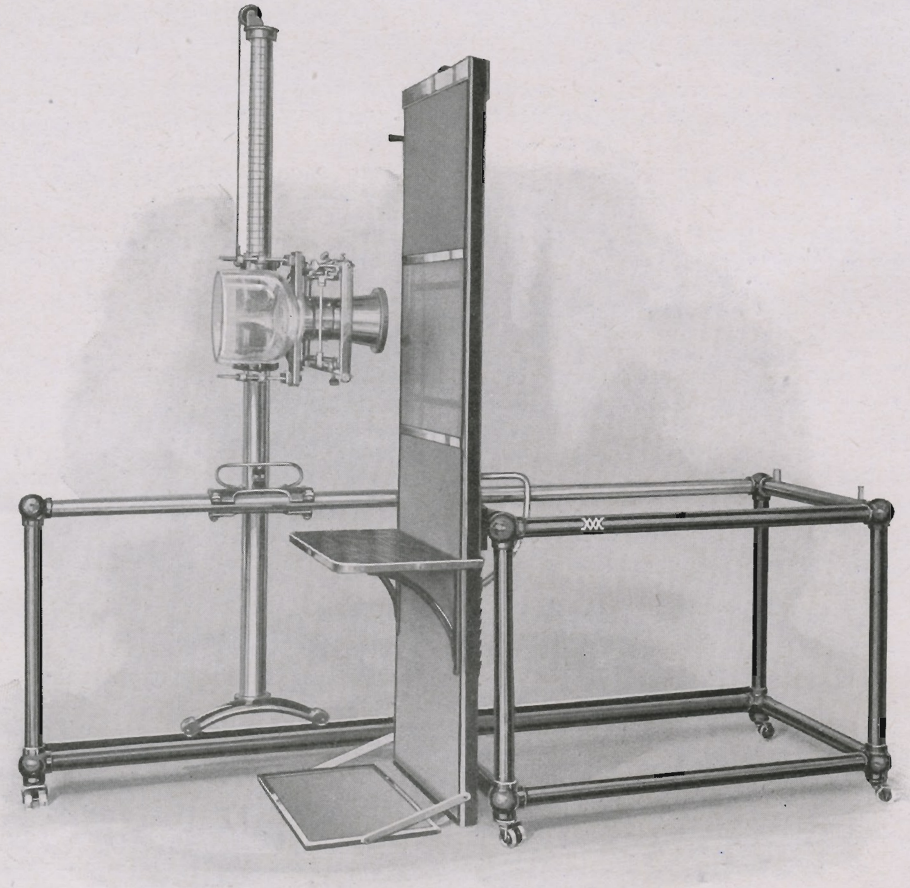
Tube may be swung below table and handled conveniently for intestinal fluoroscopy. A special attachment is then provided to keep the conducting cords away from the iron frame when the tube is used below the table. (See Price List of Extras.)

For fluoroscopy a dark hood may be slipped over lead glass bowl, thus shutting out all light of ordinary tube.

A few seconds only are required to make the necessary attachments for fluoroscopy.

No other table or device, regardless of cost, has all these facilities to do all such work with ease and dispatch.

REPLACED BY TABLE SHOWN ON
PAGE 7 MULTOSCOPE SECTION



REPLACED BY TABLE SHOWN ON
PAGE 7 MULTOSCOPE SECTION

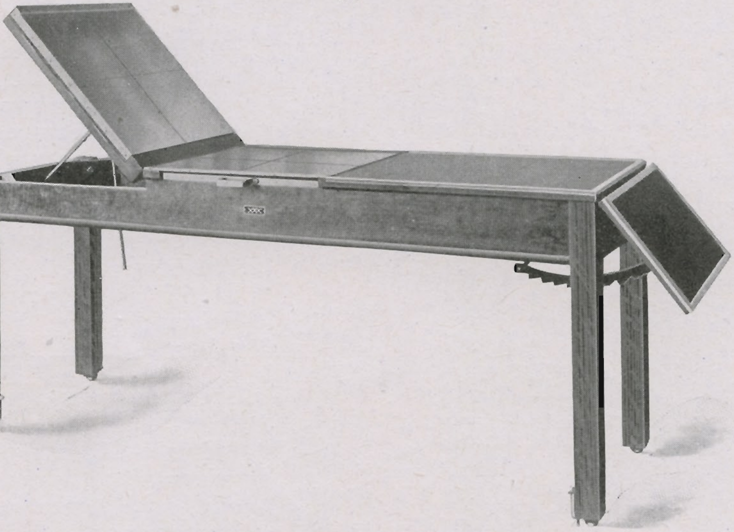
No. E-11.	Stereo-Radiographic Table and No. 5 Tube Stand Combined including two 17x17 metal cassettes. (Code Word, Tableau)	**$375.00**
No. E-12.	Stereo-Radiographic Table and No. 5 Tube Stand combined including double plate changer. (Code Word, Taboret)	**350.00**
	Attachment and reels for use with tube below table	**7.50**

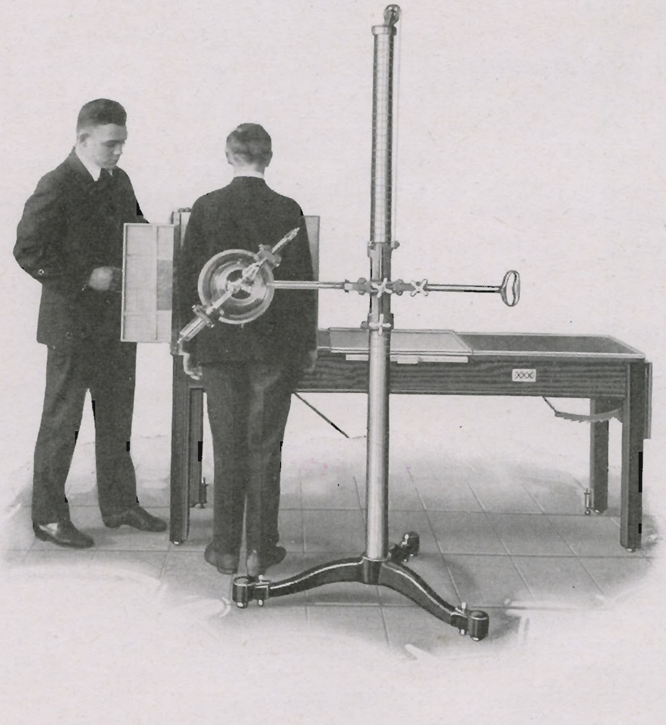
Shipping weight, 670 lbs.

No. 3 RADIOGRAPHIC TABLE

(With 2 Plate Tunnels)

Patent Applied For.





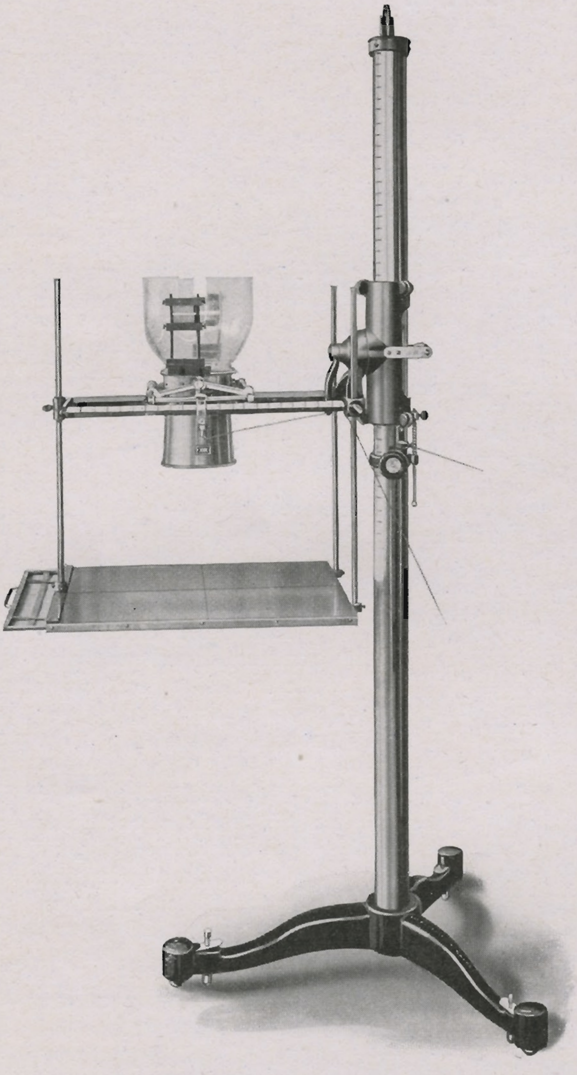
The table is built of quarter-sawed oak and the top is covered with marine linoleum, edges nickel trimmed. Two plate changer tunnels are provided, one in the usual place, the other in a folding or hinged part, which makes it available in different positions as shown.

This table represents a departure from the conventional style, and its great usefulness and adaptability have created a place for it. It is first-class in every respect.

No. E-13.	Price complete with one 17x17 Plate changer. (Code Word, Tablet)	**$ 75.00**
	1—Extra 17x17 plate changer tray	**12.00**
	1—17x17 cassette for same without screen	**20.00**

Intensifying screen. See Price List on page 26.
Shipping weight, 155 lbs.

No. 5 BALL BEARING STEREO-RADIOGRAPHIC TUBE STAND



This tube stand does all that is claimed for the most complex looking apparatus put out by any competitor. All unnecessary parts which merely serve to complicate the mechanical labor, without improving the radiographic results, have been discarded and the result is an attractive looking, efficient device.

Every moving part is on roll and ball bearings, reducing friction to a minimum.

Stereo-Radiography, either horizontal or vertical, can be done with convenience and dispatch.

The tripod has novel floor locks of our own design.

No bicycle chain or cranks to turn.

The lead glass bowl is sufficiently large to hold an 8-inch tube.

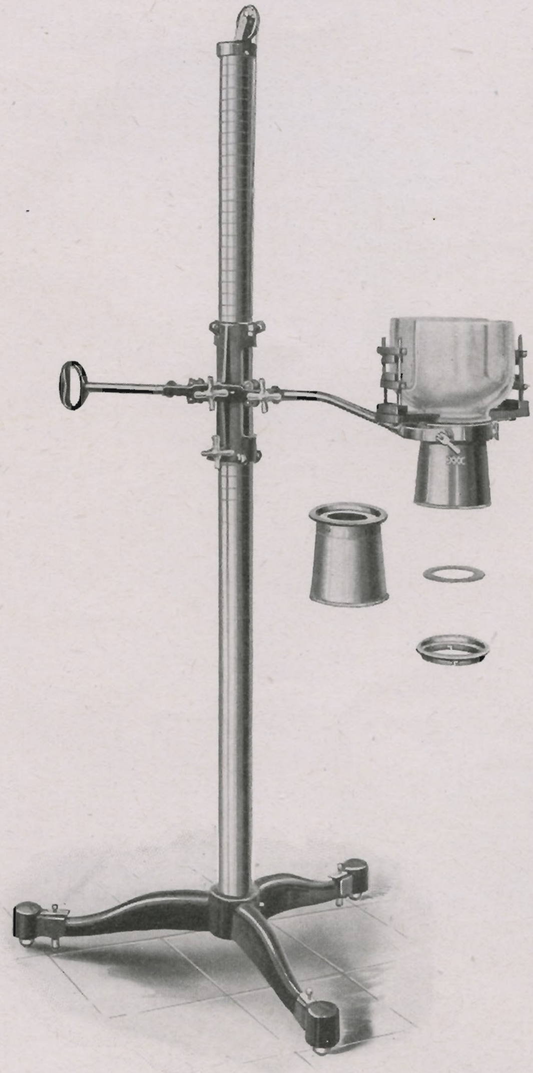
All bright parts are nickel plated on copper, insuring lasting quality.

No. E-14.	No. 5 Stereo-Radiographic Tube stand with lead glass shield, cone and plate holder. (Code Word, Steppe)	$165.00
	No. 5 Stereo-Radiographic Tube Stand with glass shield, but without cone or plate holder. (Code Word, Stereo)	130.00
	No. 5 Stereo-Radiographic Tube Stand with glass shield and cone, but without plate changer. (Code Word, Speiss)	140.00

(For different style compression cones to be used with this stand, see page 18).

Shipping weight, 275 lbs.

No. 7 STEREO-RADIOGRAPHIC TUBE STAND



The approval which purchasers gave our No. 3 Tube Stand, together with the requirements of modern therapy, have led us to bring out this stand.

It has all the good features of the No. 3, and certain improvements. Roller bearings for the vertical and horizontal slide, floor stops, and **a distance of six inches from the center of the tube to the surface to be treated.**

The angular set-off in the horizontal arm has been altered, but the balancing not disturbed.

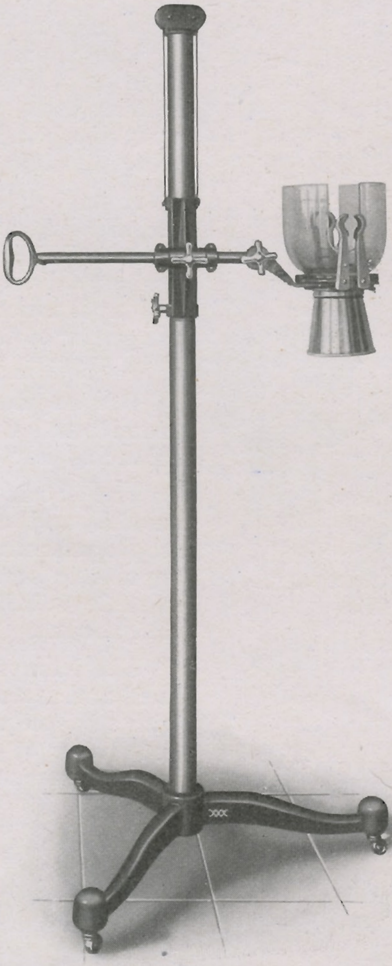
The horizontal adjustment is smooth and easy and the stereoscopic attachment is precise. Every angular or horizontal position is obtainable and the shield may be swiveled about.

The compression cone is lead lined and attaches to the tube shield with a bayonet joint. Different sizes and shapes of compression cylinders and treatment cones can be furnished.

The tripod and other parts are finished in black enamel. All other metal parts, including the upright and horizontal arm, are nickel plated.

No. E-15. No. 7 Stereo-Radiographic Tube Stand with lead glass shield and No. 2 cone, and 3⅜ inch detachable diaphragm. (Code Word, Sorghum). **$100.00**
(For other styles of compression cones to be used with this stand see page 18).
Shipping weight, 245 lbs.

No. 8 TREATMENT AND RADIOGRAPHIC TUBE STAND



This tube stand is similar to the No. 6, brought out about a year ago, but has in addition a counter-balanced horizontal arm, the counter-weight being in the upright tube.

The tripod also has casters to make movement easy.

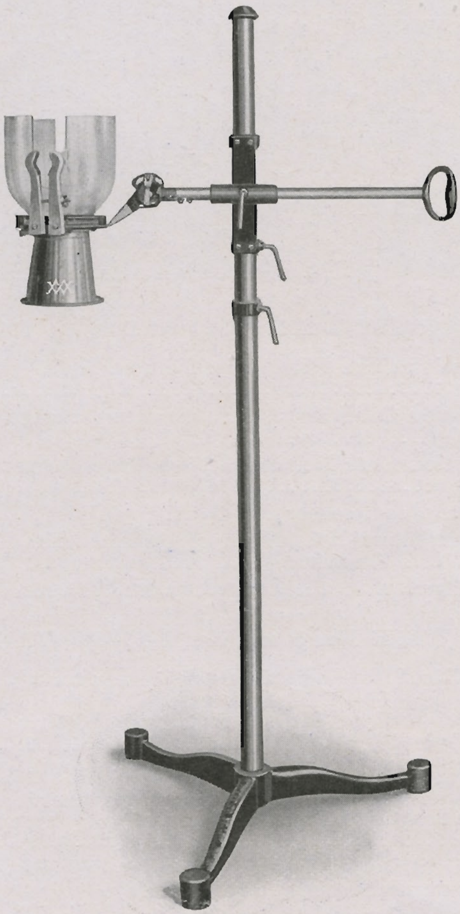
The same horizontal arm, etc., as for the No. 6 is used.

No. E-16. Price of No. 8 Treatment and Radiographic Tube Stand, including lead glass shield and No. 4 compression cone. (Code Word, Regent). $ ~~50.00~~ 60.0

(For Treatment and other cones for use with this tube stand see page 18).

Shipping weight, 150 lbs.

No. 6 TREATMENT AND RADIOGRAPHIC TUBE STAND



The demand for a low priced tube stand having the standard features of the higher priced stands, such as all metal, lead glass bowl, convenient adjustment, etc., has led us to bring out this stand, and the rapid sales have proved the desirability of same.

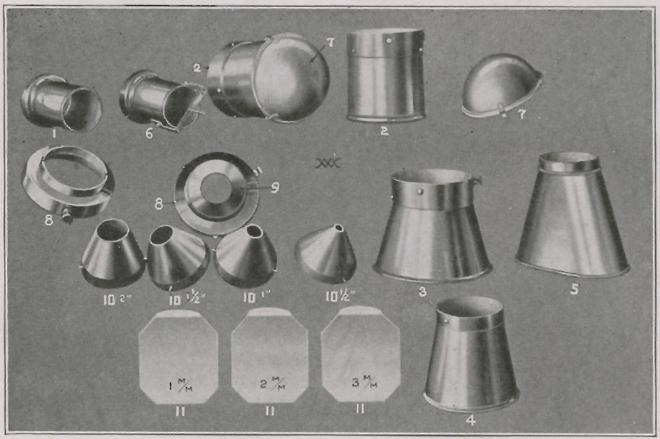
Primarily offered as a treatment stand, the addition of a compression cylinder, lead lined and of suitable size, made it an excellent stand for radiographic work, such as is done with the usual type of portable and other small apparatus.

No. E-17. Price of No. 6 Treatment and Radiographic Tube Stand, including lead glass shield and No. 4 compression cone. (Code Word, Trestand) ....$ ~~35.00~~ 40.00

(For Treatment and other cones for use with this tube stand see page 18).

Shipping weight, 115 lbs.

COMPRESSION AND TREATMENT CONES
ALUMINUM FILTERS



CONES FOR USE WITH NO. 5 AND NO. 7 TUBE STANDS.

No. E-18.	Compression Cone No. 2, 6 in. diameter at large end. (Code Word, Conical)		**$10.00**
No. E-19.	Compression Cone No. 3, 8 in. diameter at large end. (Code Word, Concave)		**10.00**
No. E-20.	Compression Cone No. 2 with kidney cup compressor. (Code Word, Convey)		**13.00**
No. E-21.	Kidney cup compressor No. 7 only. (Code Word, Cupola)		**3.25**
No. E-22.	Aluminum filters No. 11, set of three, 1 m.m., 2 m.m. and 3 m.m. (Code Word, Aluminum)	Set	**1.80**
No. E-22A.	Single filters	Each	**.75**

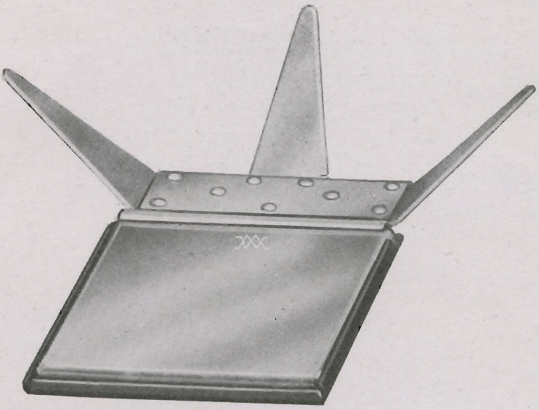
CONES FOR USE WITH No. 5 and No. 7 TUBE STANDS WITH ADAPTER.

No. E-23.	**Adapter** No. 8 (to be used with following cones)		**$ 4.00**
No. E-24.	Compression Cone No. 1, 6 in. long, 3½ in. diameter at large end. (Code Word, Conic)		**10.00**
No. E-25.	Dental Cone No. 6, 3 in. diameter at large end, with dental indicator. (Code Word, Dentate)		**12.00**
No. E-26.	Compression Cone No. 4, 5 in. diameter at large end. (Code Word, Cycle)		**7.50**
No. E-27.	Special Oval Lead Lined Compression Cylinder No. 5, 8¼ in. x 5⅛ in. measurement at large end. (Code Word, Ovate)		**10.00**
No. E-28.	Treatment Cones No. 10 per set of four (size of opening, ½ in., 1 in., 1½ in. and 2 in.) Code Word, Cycloid)		**13.00**
No. E-28A.	Single Treatment Cone (state size of opening desired)		**3.25**
No. E-29.	Special Short Treatment Diaphragm No. 9		**3.25**

CONES FOR USE WITH NO. 6 AND NO. 8 TUBE STANDS.

No. E-24.	Compression Cone No. 1, 6 in. long, 3½ in. diameter at large end. (Code Word, Conic)		**10.00**
No. E-26.	Compression Cone No. 4, 5 in. diameter at large end. (Code Word, Cycle)		**7.50**
No. E-27.	Special Oval Lead Lined Compression Cylinder No. 5, 8¼ in. x. 5⅛ in. measurement at large end. (Code Word, Ovate)		**10.00**
No. E-25.	Dental Cone No. 6, 3 in. diameter at large end with dental indicator. (Code Word, Dentate)		**12.00**
No. E-28.	Treatment Cones No. 10 per set of four: ½ in., 1 in., 1½ in. and 2 in. openings. (Code Word, Cycloid)		**13.00**
No. E-28A.	Single treatment cones. (State size of opening desired)		**3.25**
No. E-22.	Aluminum Filters No. 11, set of three, 1 m.m., 2 m.m. and 3 m.m. (Code Word, Aluminum)	Set	**1.80**
No. E-22A.	Single Filters	Each	**.75**

DENTAL FILM TUNNEL



Dental Radiography is making marked advances, but in order to obtain really good radiographs it has been necessary to abandon the old method of putting a small film flat against the teeth.

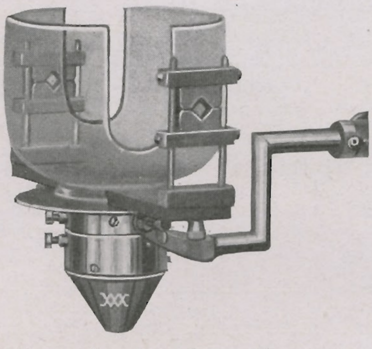
This method does seldom produce the apex of the tooth, unless the film is held by the dentist.

Further, the procedure is risky, because the patient may be suffering with syphilitic infection and last, but not least, the operator, who will continue to hold the film in position for his patients, will surely get X-ray necrosis.

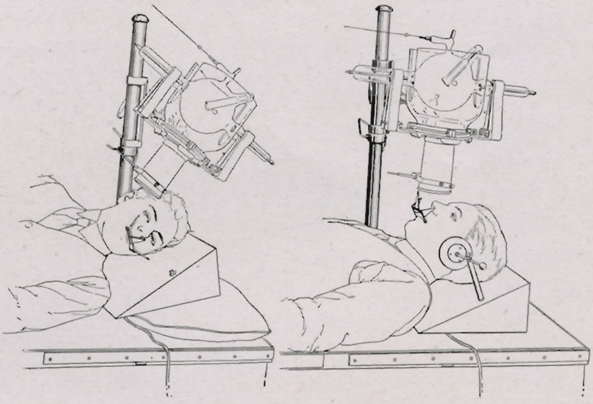
This tunnel gives freedom from all objections, it is sterilizable, is fitted with a removable indicator for the proper position of the tube and allows the making of stereoscopic negatives. When used correctly the teeth will show absolutely normal on the film.

No. E-30. Price of Dental Film Tunnel complete with directions. (Code Word, Tunic) .... **$ 5.00**

(Postpaid for cash with order.)

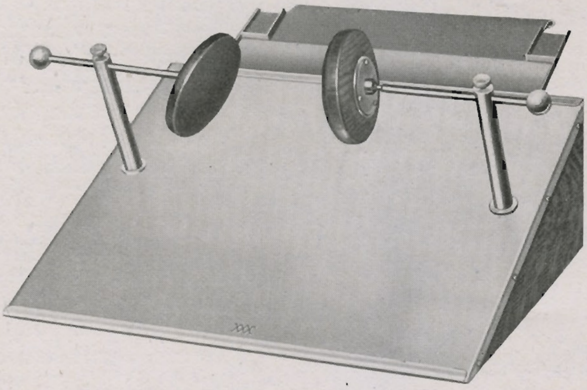


View showing how Treatment Cones are attached to No. 5 and No. 7 Tube Stands.



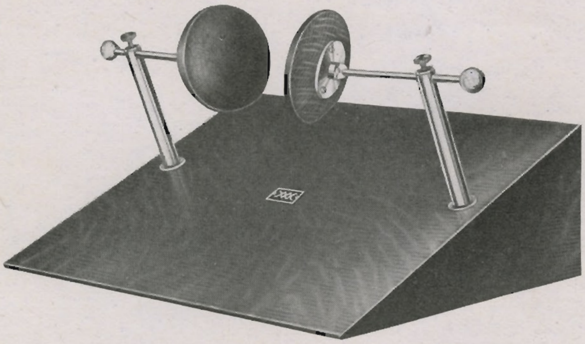
Views showing how Dental Indicator is attached to Tube Stand and how same is used in connection with Dental Film Tunnel.

HEAD REST WITH PLATE CHANGER TUNNEL



No. E-31. (Code Word, Headnell). Price.................................... **$12.50**

PLAIN HEAD REST

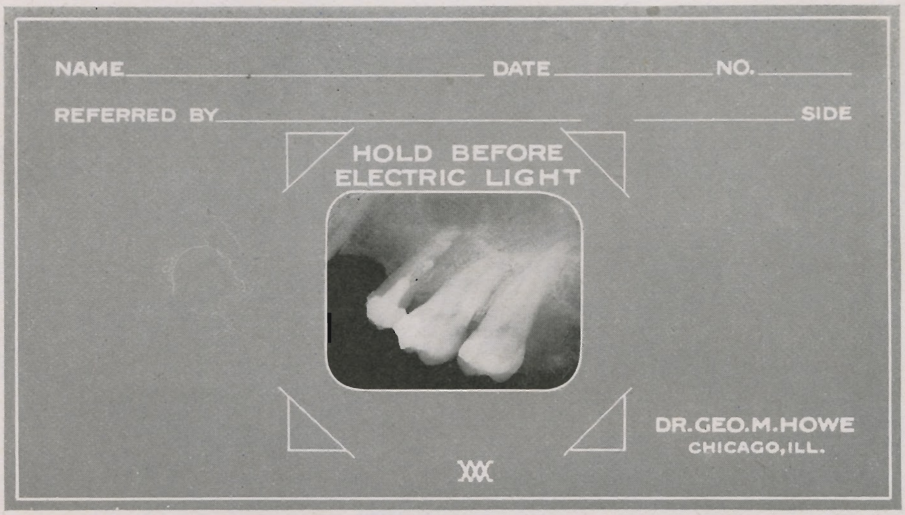


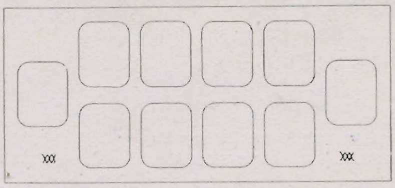
No. E-32. Head Rest complete. (Code Word, Pillow)........................ **$ 7.50**

For radiographs of the Frontal Sinuses, for dental radiography or other X-ray work about the head where a fixed position is desirable, these rests are necessary if sharp detail is desired.

Prices not guaranteed on account of
unsteady cost of materials. Articles
will be billed at lowest market prices
when order is filled.

DENTAL FILM MOUNTS





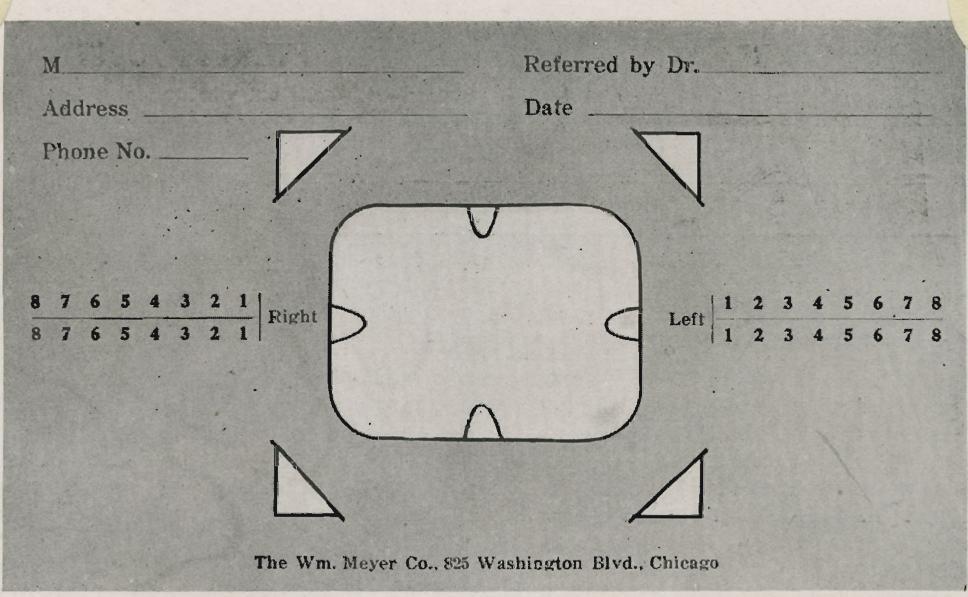
Dental film mounts made of black cardboard with celluloid windows give fine contrast and bring out every film detail with distinctness. A trial order will convince you.

No. E-33. Price list of Black Dental Film Mounts.

No.	Size Mount	Size of Films	No. of Films	Position of Film	25	50	100	200	300	500	1000
1	3 x5	1¼x1⅝	1	Horizontal		$2.90	$ 3.90	$ 6.30	$ 8.70	$13.50	$25.50
2	3 x5	"	1	Vertical		2.90	3.90	6.30	8.70	13.50	25.50
3	3 x5	"	2	Horizontal		3.80	4.50	7.50	10.50	16.50	31.50
4	3 x5	"	2	Vertical		3.80	4.50	7.50	10.50	16.50	31.50
5	3 x6	"	3	Horizontal	$3.70	4.20	5.50	9.50	13.50	21.50	41.50
6	3 x5	"	3	Vertical	3.70	4.20	5.10	8.70	12.30	19.50	37.50
7	3 x7½	"	4	Horizontal	4.90	5.90	7.30	13.10	18.90	30.50	59.50
8	3 x6	"	4	Vertical	4.70	5.50	6.70	11.10	15.90	25.50	49.50
9	3 x9	"	5	Horizontal	5.40	7.00	10.00	18.00	26.00	42.00	82.00
10	3 x7½	"	5	Vertical	5.20	6.40	9.00	16.00	23.00	37.00	72.00
11	4¼x10	"	10	Horizontal	7.80	9.00	15.00	28.00	41.00	67.00	130.00

VOID

These Prices include imprinting with customer's name and address. Not less than 100 printed. Mounts Nos. 1 and 2 furnished for 1½x2¼ Film without extra charge.



M__________ Referred by Dr.__________

Address __________ Date __________

Phone No. __________

8 7 6 5 4 3 2 1 | Right
8 7 6 5 4 3 2 1 |

Left | 1 2 3 4 5 6 7 8
| 1 2 3 4 5 6 7 8

The Wm. Meyer Co., 825 Washington Blvd., Chicago

GRAY MOUNTS with CELLULOID INSERT

(For Films $1\frac{1}{4}$x$1\frac{5}{8}$)

These Film Mounts are made of gray cardboard with removable celluloid windows. They give fine contrast and bring out every film detail with distinction. You can write with ordinary ink on the gray film mount. Observe the numbering for indexing the radiograph.

Style No.	Size Card	No. of Films	Position of Film	25	50	100	200	300	500	1000
1H-Insert	5 x3	1	Horizontal	$2.60	$2.90	$3.90	$6 30	$8.70	$13.50	$25.50
2H-Insert	5 x3	1	Vertical	2.60	2.90	3.90	6.30	8.70	13.50	25 50
3H-Insert	5 x3	2	Horizontal	3.40	3.90	4.70	7.90	11.10	17.50	33 50
4H-Insert	5 x3½	2	Vertical	3.40	3.90	4.70	7.90	11.10	17.50	33.50
5H-Insert	7¼x3	3	Horizontal	3.70	4.30	5.60	9.70	13.80	22.00	42.50
6H-Insert	7¼x3½	3	Vertical	3.80	4.50	5.80	10.10	14.40	23.00	44.50
7H-Insert	9¾x3	4	Horizontal	5.00	6.20	7.90	14.30	20.70	33 50	65.50
8H-Insert	9½x3½	4	Vertical	5.00	6.00	7.60	12.90	18.60	30.00	58.50
SEE NOTE BELOW FOR NO'S 9H--10H--11H										
9H-Insert	10 x3	5	Horizontal	5.50	7.30	10.50	19.00	27.50	44.50	87.00
10H-Insert	8 x3	5	Vertical	5.30	6.70	9.50	17.00	24.50	39.50	77.00
11H-Insert	10 x5	10	Horizontal	8.00	9.30	15.60	29.20	42.80	70.00	136.00

Note—No's 9H, 10H, 11H are made with the celluloid stitched to the back of the card, as to use the separate celluloid window for each opening would make the size of the card containing five (5) and ten (10) openings too large to be convenient for filing and handling. Regular film-size openings are used, with the celluloid punched to hold the film.

(For other styles of film mounts, see the reversed side)

PRICE LIST OF BLACK DENTAL FILM MOUNTS

Dental Film Mounts made of black cardboard with celluloid windows give fine contrast and bring out every film detail with distinctness. A trial order will convince you.

(For Films 1¼x1⅝)

No.	Size Mount	No. of Films	Position of Film	25	50	100	200	300	500	1000
1	3 x5	1	Horizontal	$2.60	$2.90	$3.90	$ 6.30	$ 8.70	$13.50	$25.50
2	3 x5	1	Vertical	2.60	2.90	3.90	6.30	8.70	13.50	25.50
3	3 x5	2	Horizontal	3.40	3.80	4.50	7.50	10.50	16.50	31.50

Mounts, Nos. 1, 2 and 3 are for cards in vertical position. If you wish horizontal position indicate as Nos. 1H, 2H, or 3H. All larger mounts are horizontal.

No.	Size Mount	No. of Films	Position of Film	25	50	100	200	300	500	1000
4	5 x3	2	Vertical	3.40	3.80	4.50	7.50	10.50	16.50	31.50
5	6 x3	3	Horizontal	3.70	4.20	5.50	9.50	13.50	21.50	41.50
6	5 x3	3	Vertical	3.70	4.20	5.10	8.70	12.30	19.50	37.50
7	7½x3	4	Horizontal	4.90	5.90	7.30	13.10	18.90	30.50	59.50
8	6 x3	4	Vertical	4.70	5.50	6.70	11.10	15.90	25.50	49.50
9	9⅜x3	5	Horizontal	5.40	7.00	10.00	18.00	26.00	42.00	82.00
10	7½x3	5	Vertical	5.20	6.40	9.00	16.00	23.00	37.00	72.00
11	9⅜x4	10	Horizontal	7.80	9.00	15.00	28.00	41.00	67.00	130.00

ALL-CELLULOID DENTAL FILM MOUNTS

(For Films 1¼x1⅝)

No.	Size Mount	No. of Films	Position of Film	25	50	100	200	300	500	1000
12	3⅛x4⅜	1	Horizontal	$2.80	$3.60	$4.80	$ 8.90	$13.00	$21.20	$41.70
13	3⅛x4⅜	2	Vertical	3.30	4.20	5.50	10.20	14.90	22.30	47.70

Nos. 12 and 13 are vertical type. If you wish horizontal, use Nos. 12H or 13H. For a smaller mount use No. 18 or 19.

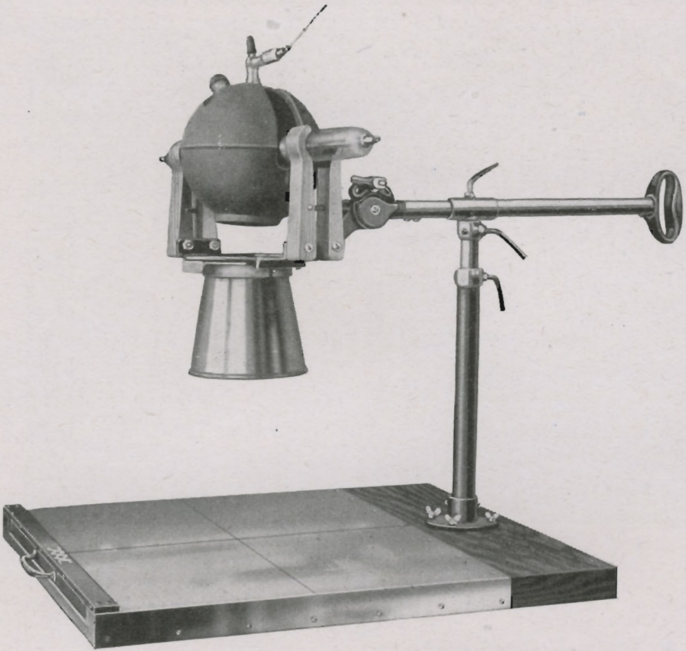
No.	Size Mount	No. of Films	Position of Film	25	50	100	200	300	500	1000
18	4¼x2¾	1	Horizontal	2.70	3.50	4.50	8.00	11.50	18.50	36.00
19	4¼x2¾	2	Vertical	2.90	3.80	5.20	9.30	13.40	21.50	42.00
14	6¼x2¾	3	Horizontal	4.50	5.70	6.90	12.30	17.70	28.50	55.50
14v	5 x3	3	Vertical	4.50	5.70	6.90	12.30	17.70	28.50	55.50
15	4½x3⅞	4	Horizontal	5.50	6.40	8.00	14.00	20.00	32.00	62.00
16	7¾x3	5	Vertical	6.30	7.80	9.00	16.00	23.00	37.00	72.00
17	10 x4	10	Horizontal	8.00	11.00	16.00	30.00	44.00	72.00	142.00
17v	9 x4¼	10	Vertical	8.00	11.00	16.00	30.00	44.00	72.00	142.00

These prices include imprinting with customer's name and address.

Prices will be quoted on request for Special Forms, Special Sizes and for Films of Other Sizes. In requesting prices for any Special Item, please send a diagram indicating your needs and the printing thereon.

The Wm. Meyer Co., 825 W. Washington Blvd., Chicago

PORTABLE COMPRESSION APPARATUS

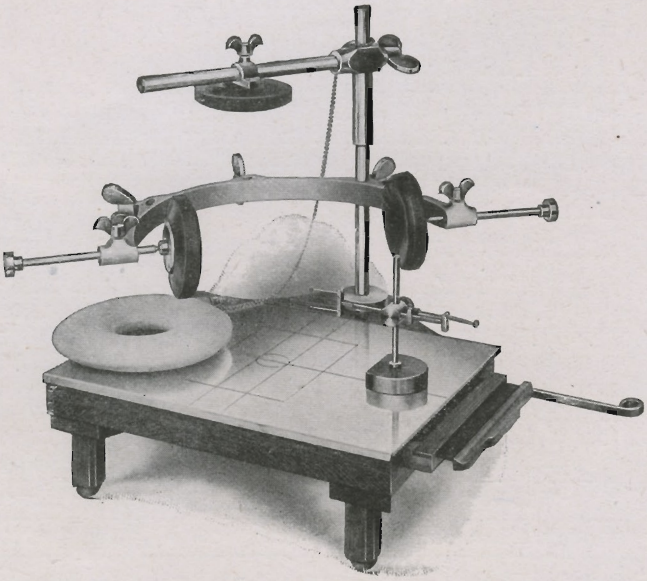


This apparatus may be entirely taken down for transportation and is ideal for use with a portable X-ray apparatus to be used at the bedside. It is universal in its movements and can be used for the most difficult work. No danger of broken plates.

Patent Applied For.

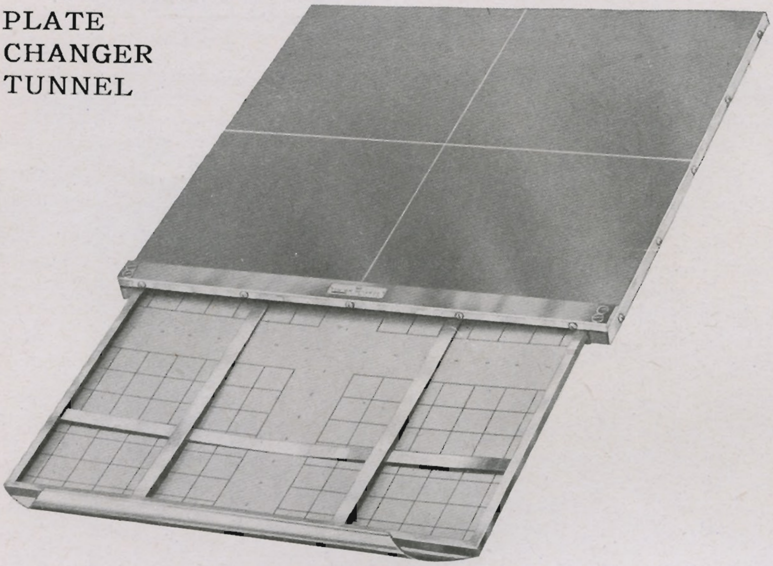
No. E-34.	Portable compression apparatus and plate changer tunnel with either lead glass or opaque rubber shield. (Code word, Comport)..........**$60.00**

EYE LOCALIZER



No. E-35.	Eye Localizer (Code word, Locate)..............................**$38.50**

PLATE CHANGER TUNNEL



This tunnel will do very well where no radiographic table with automatic plate changer is desirable. Made on a heavy steel frame and covered with aluminum, stretched so that it will not sag. The plate holder has four adjustable slides which hold the plate securely in any position and permit its ready removal and substitution of a second plate. Made in two sizes.

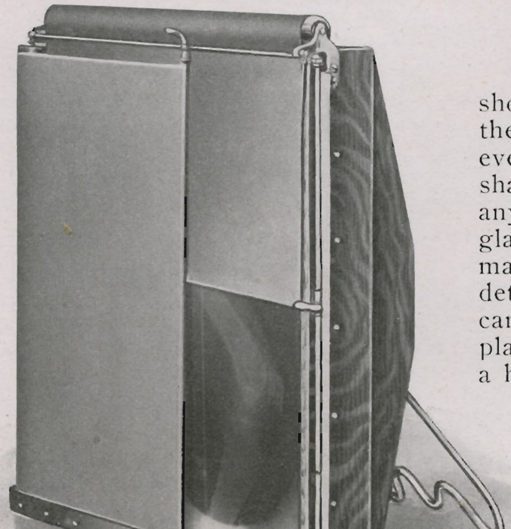
Size 1 will hold any plate up to and including 11x14.

Size 2 will hold any plate up to and including 14x17.

No. E-36.	Plate changer tunnel, 17x17. (Code word, Plateau)................	**$20.00**
	Plate changer tunnel, 14x14. (Code word, Platnell)................	**15.00**

NEGATIVE ILLUMINATING CABINET

(Prismatic Reflector)



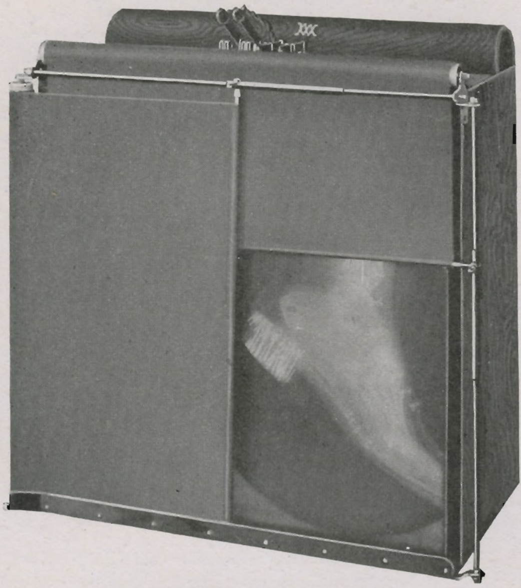
The illuminating cabinet here shown requires but a single lamp of the Nitrogen type to give a perfect, even illumination throughout. Roller shades allow perfect adjustment for any size negative. The fine quality of glass used in connection with the prismatic reflector brings out the faintest details of a negative contrastingly. It can be easily transported and may be placed on a table or suspended from a hook on the wall.

No. E-37.

Negative illuminating cabinet, Prismatic reflector type. (Code word, Illude) **$27.00**

Shipping weight, 65 lbs.

NEGATIVE ILLUMINATING CABINET

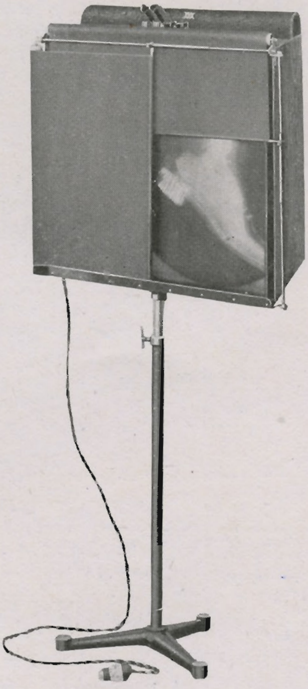


(FOUR LIGHT TYPE)

This needs no special introduction, but the advantage ours has is, the four switches at the top may be used to light one lamp or any combination, as a negative may require more or less illumination on one particular part. Fitted with four 40-watt tungsten lamps.

No. E-38. Negative illuminating cabinet on stand (Code word, Illume) $35.00

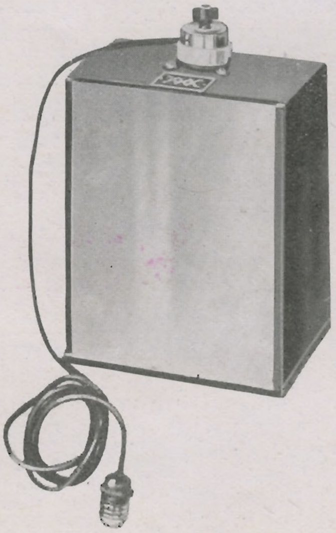
No. E-39. Negative illuminating cabinet only. (Code word, Illusion)......... 30.00
Shipping weight, 65-75 lbs.



If Cobalt blue lamps are wanted for these Diagnostic Cabinets we can furnish the following:

75 Watt at......................	$ 1.00
100 Watt at......................	1.30
150 Watt at	1.85

No responsibility assumed for breakage in transit.



MIDGET ILLUMINATING CABINET

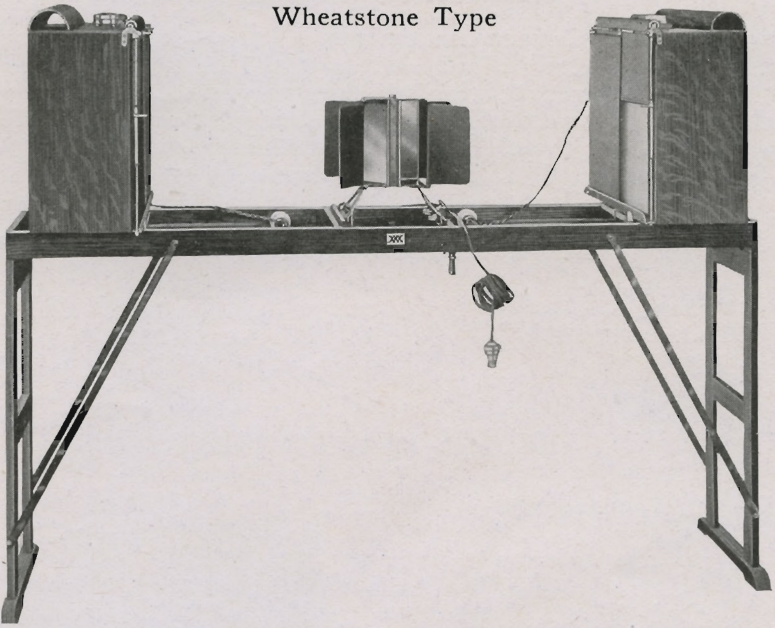
For examining X-Ray Negatives. Will accommodate any size plate or film up to and including 8x10 inches.

The cabinet is made of all metal and is furnished complete with diffusing screen, lamp and connecting cord.

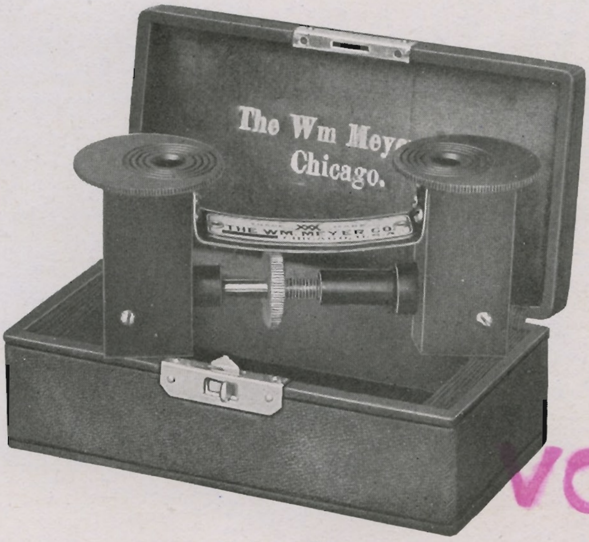
No. E-40. (Code word, Viewer).
Price ....$ 8.50

STEREOSCOPES

Wheatstone Type



No. E-41. Stereoscope Wheatstone type Floor Stand. (Code word, Mirror)....**$93.50**
No. E-42. Stereoscope Wheatstone type, six inch legs. (Code word, Mirage).... **88.00**
Shipping weight, 215 lbs.



VOID.

Prism Type

The instrument here shown is as convenient as an opera glass and can be used at different distances from the negative. No blurring or straining of the eyes.

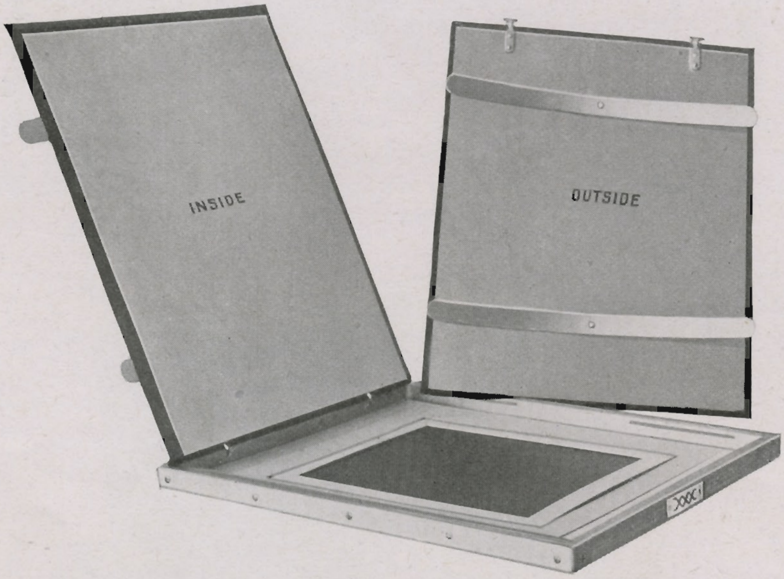
No. E-43. Stereoscope, Prism type. (Code word, Opera)......................**$15.00**

INTENSIFYING SCREENS

Our Intensifying Screens are the most perfect obtainable and have a speed not attained by any other. The crystals being extremely fine, there is no mottling of the negative and the durability is not in the least affected or unsafe. The usual time of exposure is reduced about 95%. We furnish the screens with or without the cassette as listed below.

	Code Word.	Size.	Price of Screen only.	Price of Screen and Cassette.
No. E-44.	Tensor,	8x10	**$21.00**	**$29.00**
	Tension,	10x12	**30.00**	**40.00**
	Tentate,	11x14	**40.00**	**52.00**
	Tentum,	14x17	**57.50**	**72.50**

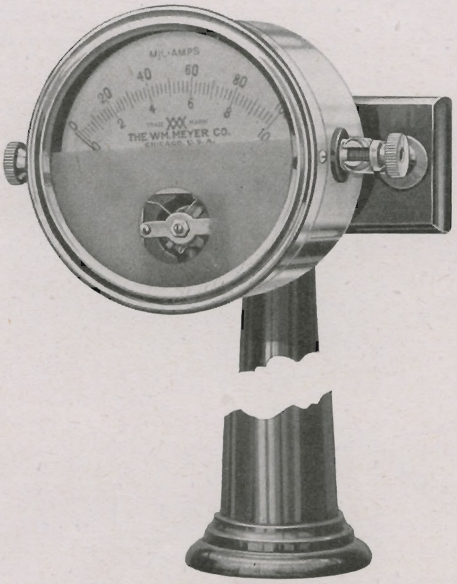
ALUMINUM CASSETTES



	Code Word	Size	Price
No. E-45.	Metal,	8x10	**$10.00**
	Metallic,	10x12	**12.00**
	Metalline,	11x14	**14.00**
	Metallist,	14x17	**18.00**
	Metalloid,	17x17	**20.00**

(Prices subject to change without further notice.)

MILLIAMMETER

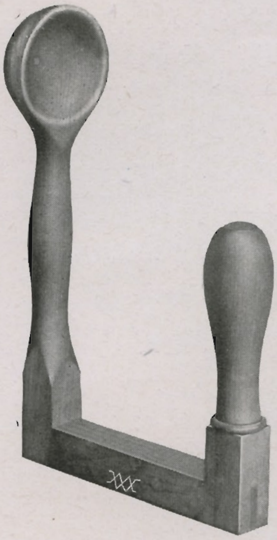


Milliammeters suitable for X-ray work must have two scales, giving a low reading of a few milliamperes for radio-therapy or radioscopy, and a high reading for radiography. If the meter is **set** for reading low current values and a current of high intensity is sent through same, then the delicate apparatus will be damaged and rendered useless in a short time.

We have devised a means whereby the meter reads normally the high current values, and reads the low currents only while under the active control of the operator, thus making it practically foolproof.

No. E-46. Milliammeter reading 0-10 and 0-100 milliamperes, suitable for interrupterless, four inch dial, 12 inch pedestal and connecting cords. (Code word, Millray) **$30.00**

No. E-47. Milliammeter reading 0-15 and 0-150 milliamperes, suitable for interrupterless, five inch dial, 12 inch pedestal and connecting cords. (Code word, millrex) **$37.50**



MASSAGE SPOON

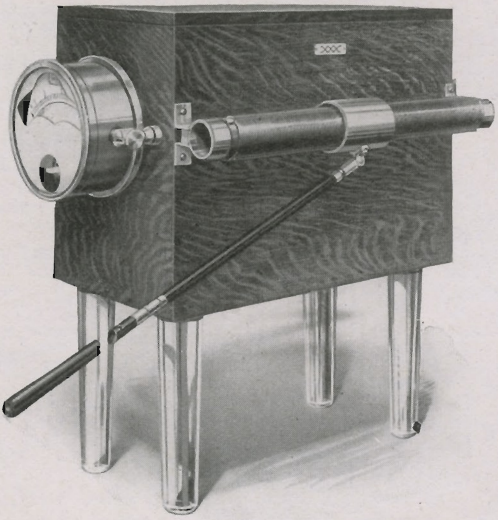
In fluoroscopy of the gastro-intestinal tract, and especially the stomach, it is often necessary to palpate same to bring out or examine certain details. This spoon will be found a valuable aid. While the rays penetrate it easily, a copper button located in the center of the bowl makes its handling from in back of the lead glass protected fluoroscopic screen quite simple.

No. E-48. Price of Massage spoon. (Code word, Spoon) **$2.50**

TRADE XXX MARK

COOLIDGE TUBE ACCESSORIES

TRANSFORMER FOR LIGHTING COOLIDGE TUBE FILAMENT



No. E-49.	Transformer for lighting Coolidge tube 110 volt, 60 cycle A. C. (Code word, Transept)	**$50.00**
No. E-50.	Rheostat mounted on transformer case, 12 volt type. (Code Word, Revere)	**20.00**
No. E-51.	Ammeter reading 0-6 amperes, 6 in. diameter. (Code Word, Meterage)	**25.00**
No. E-52.	Rotary converter in connection with step down transformer for use on direct current. (Code Word, Roster).......	~~**35.00**~~ $42.00

Shipping weight of transformer, 135 lbs.

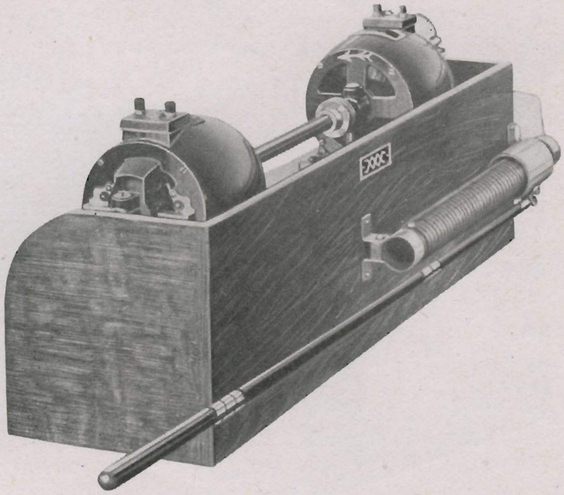
A. C. CONVERTER, 110-120 A. C.—12 VOLT D. C.

For Heating Coolidge Tube Cathode

A storage battery will deliver a steady current, not influenced by outside conditions, but the acid and usual battery troubles make it objectionable.

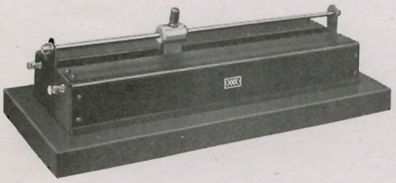
A step-down transformer does away with the acid, and if used from another circuit than the one the X-ray machine is connected to is also fairly steady, but not sufficiently for treatment work.

This rotary converter is absolutely steady and is not affected by any fluctuations on the line circuit, whether separate or the one used for the X-ray machine. It represents the Ideal Method.



No. E-53. Price, complete with quarter-sawed oak, hand polished frame and controlling rheostat, but without ammeter. (Code Word, Motory..~~**$100.00**~~ $125.00
Price complete as above, with ammeter. (Code Word, Motorial).... ~~**125.00**~~ $150.00
Shipping weight, 125 lbs.

PORTABLE CONTROLLER FOR COOLIDGE TUBE LIGHTING TRANSFORMER

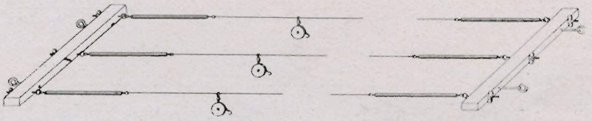


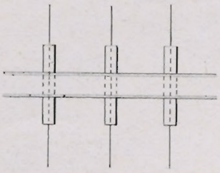
Where the radiographic work is done in one room and the fluoroscopic work in another, it is highly desirable to have a portable controller available, within reach of the operator. This controller meets the requirements perfectly.

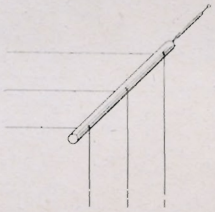
When this controller is ordered with the step-up transformer, the glass legs are not furnished.

No. E-54. Price, complete, of controller. (Code Word, Portroller).......... **$25.00**
Screw adjustment, instead of slide, is recommended if intended for treatment work.

AERIAL WIRING





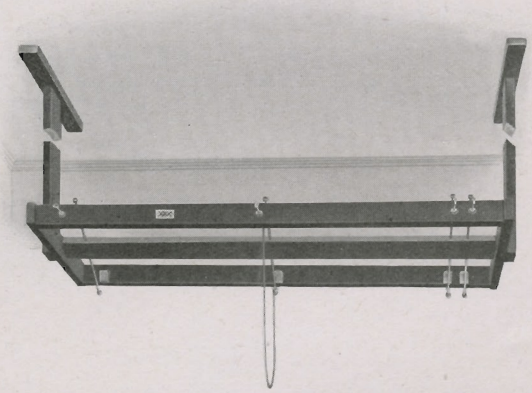


Wall hooks for wood and plaster walls	(4)
Cross arms	(2)
Eye bolts, 5 to each cross arm	(10)
End insulators	(6)
Wire rubber covered	(60 ft.)
(Additional 2 cents per foot.)	
Reels, automatic, for aerial wire with swivels	(3)
Chain to connect machine reels to aerial not to exceed nine feet.	

No. E-63.	Price of above outfift	**~~$15.00~~** 18.75
	Angle rod with insulator	**.75**
	Wall insulator tubes, 1 in. diameter. Per foot	**1.00**
	Wall insulator tubes, 3 in. diameter. Per foot	**~~2.15~~** 5.00
	For Coolidge tube for radiography add	
	1 reel with cord to take up slack in duplex cord	**3.25**

AERIAL SWITCHES

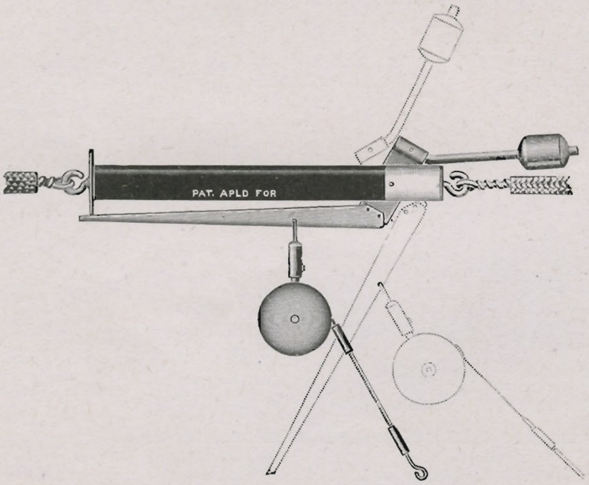
(For Coolidge Tube)



On overhead wiring, for use with Coolidge tube with upright brackets not to exceed 4 feet.

No. E-64. Price complete as shown in illustration. (Code Word, Aerify)........**$15.00**

(For Ordinary Tube)



Two are required in overhead circuit and are placed in the overhead wiring at the point where the radiographic table and tube stand are located.

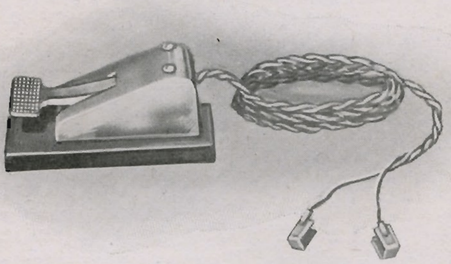
When the radiographic tube is connected with the aerial reels, the switch blade is in the dotted line position, leaving a large air gap toward the overhead wire connecting with the radioscope.

No. E-65. (Code Word, Aerio.) One set of aerial switches, including two switches and two 6 ft. tape reels with 2 ft. cord extension. Price....**$16.50**

No. E-66. (Code Word, Aerial.) Two aerial switches without reels. Price.... **12.00**

FOOT SWITCHES

(Single Contact)



The foot switch shown here is a strong, well made switch, highly appreciated by those who desire a simple, effective foot control for radioscopy.

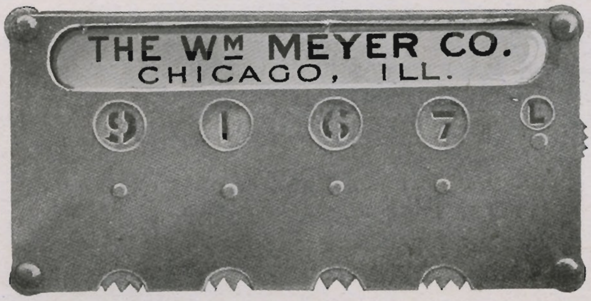
No. E-55A. Price including separable plug and 15 ft. cable with clips to attach to knife switch. (Code Word, Swift)..**$7.50**

(Three Contact)

This foot switch has three contacts giving three grades of illumination with the radioscope. It has also a switch for the room light.

No. E-55. Price complete including 15 ft. cable with clips to attach to transformer rheostats, but no wires to room light. (Code Word, Swiftly).**$20.00**

PLATE MARKER



No. E-56. (Code Word, Stencil.) Price......**$4.50**

LEAD LETTERS AND FIGURES

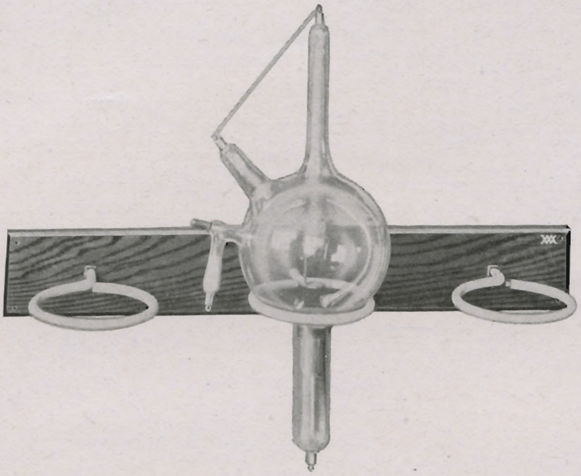
A B C D E F G

1 2 3 4 5 6 7 8 9 0

(Height of figures and letters, ¼ inch.)

Price per letter or figure..**$0.04**

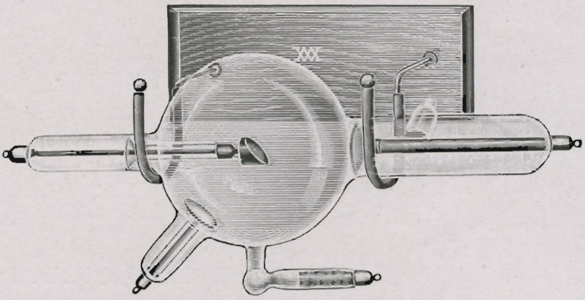
TUBE RACK (Triple)



This rack will hold three tubes up to 8-inch bulb included, and is especially desirable when the horizontal space is limited.

No. E-62. Price of Triple Tube Rack. (Code Word, Trirack) **$3.00**

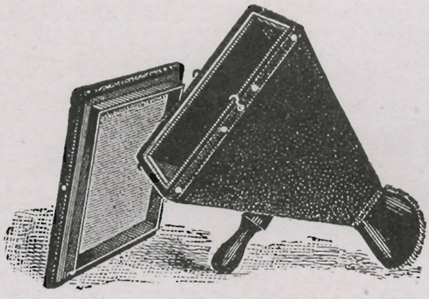
TUBE RACK (Single)



Where a number of X-ray tubes are kept it is well to have a rack or hanger for each tube to support it when not in use. The supports of this rack are covered with sleeving to prevent the cold metal from coming into contact with the glass, which might endanger the tube, when still warm after usage.

No. E-61. Price of Single Tube Rack. (Code Word, Sinrack) **$1.10**

FLUOROSCOPES AND SCREENS

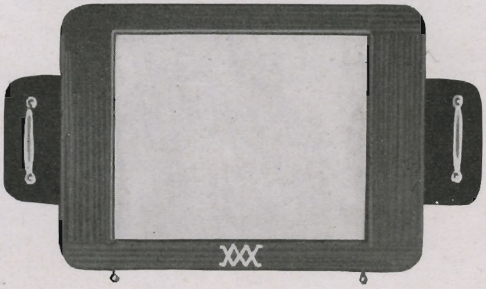


No. E-57. Fluoroscope with plain hood (best screen 5x7). (Code Word, Fluoro) **$14.40**

Fluoroscope, lead glass protection (best screen 5x7). (Code Word, Flume) **19.20**

Fluoroscope Screens only, best quality. Per sq. inch. **.30**

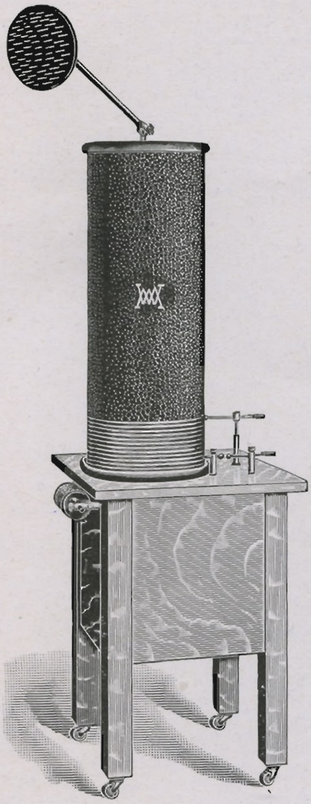
A special 11x14 screen mounted in a polished oak frame, with handles at each end, fully protected with lead and lead glass, with counterweights and pulleys to suspend from the ceiling, will be furnished to order.



No. E-58. Price complete of 11x14 Fluoroscopic Screen in lead protected frame with lead glass covering, but without counterweights or pulleys. (Code Word, Flummery) **$65.00**

No. E-59. Price complete of 12x16 Fluoroscopic Screen in lead protected frame with lead glass covering, but without counterweights or pulleys. (Code Word, Flue) **75.00**

No. E-60. Price of Counterweights and Pulleys. (Code Word, Pley) **3.00**



RESONATOR

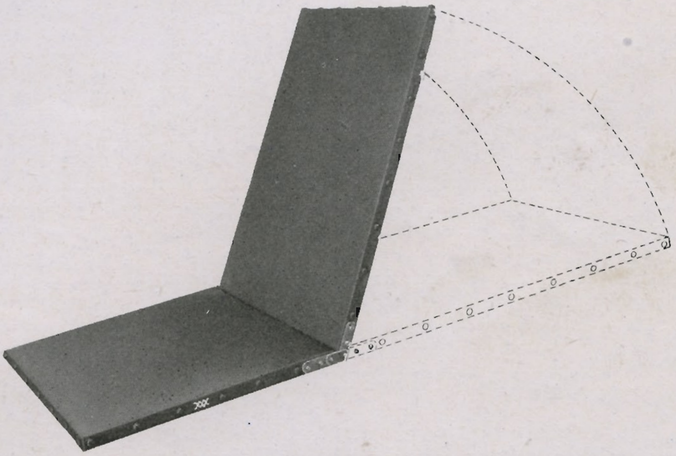
The W. M. Resonator has many points of distinction which make it easily the peer of similar devices. The troublesome Leyden jars have been eliminated and superseded by a set of condenser plates with about four times the capacity and ten times the dielectric strength of the former.

The resonator is supplied with adjustable spark gap and muffler, spark gap in the primary circuit for the control of the static spark, round ball charger and effluve disc at the postive terminal. An effluve 12 inches long can be obtained. The current strength developed is sufficient to energize a heavy anode X-ray tube. The woodwork is quarter-sawed oak and in connection with the gold lacquered brass work gives a rich appearance.

No. E-67. Resonator complete with arm, ball and disc, electrode and one 3 ft. H. F. cord. (Code Word, Resound). **$50.00**

Shipping weight, 165 lbs.

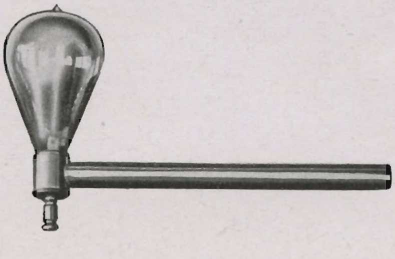
COUCH PAD



The couch pad is made in two hinged sections and will fit any chair, table or couch, and weighs only 18 pounds.

It is covered with a good grade of black leatherette, is 18 inches wide and has a total length of 43 inches, including hinge space.

No. E-68. (Code Word, Paddle.) Couch Pad. Price.......................... **$20.00**
Shipping weight, 24 lbs.



No. E-69. (Code Word, Serrate.) Auto-Condensation Handle with Series Lamp................. **$3.00**

No. E-70. (Code Word, Santate.) Auto-Condensation Handle, plain.. **1.50**

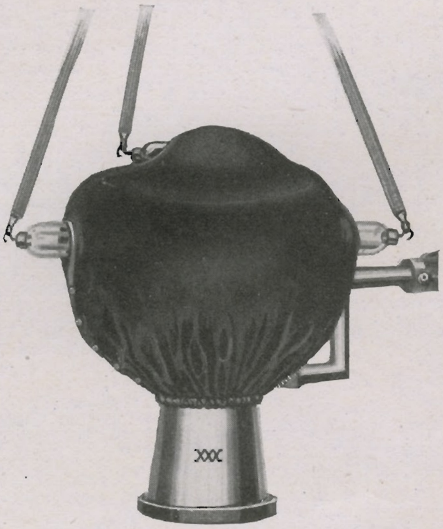
PROTECTIVE DEVICES

X-RAY PROOF RUBBER HOOD

This Hood is made especially to cover the lead glass tube shield for fluoroscopy to exclude the light rays and also gives increased protection. (For use with our radioscope. For illustration see page 8.)

No. E-71. X-ray proof rubber hood. (Code Word, Opaque) **$15.00**

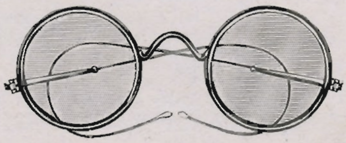
CLOTH TUBE COVER



Those who use the lead glass tube shield and wish to do fluoroscopy will appreciate this tube cover or hood, which will cut out the light entirely, but not the X-ray.

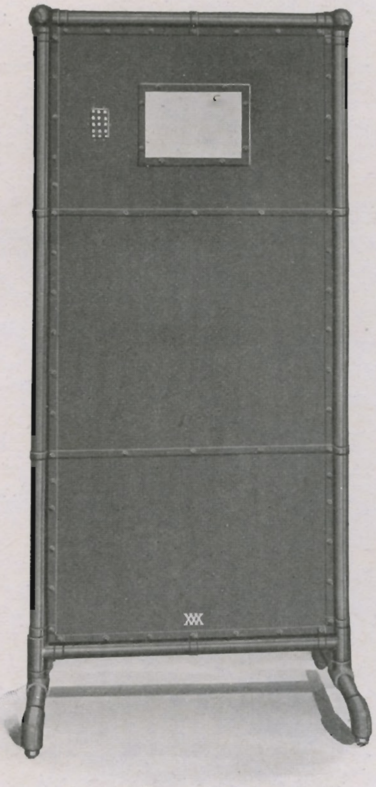
No. E-72. (Code Word, Hood) **$1.50**

PROTECTIVE SPECTACLES



These spectacles are made of heavy imported lead glass, which offers efficient protection to the eyes of the X-ray worker.

No. E-73. Price of Protective Spectacles, including case. (Code Word, Protect) . **$5.00**



X-RAY PROTECTIVE SCREEN

This screen serves to protect the X-ray operator from stray rays as well as the static emanations which are projected from the X-ray tube in all directions. The frame is made of steel mounted on ball bearing casters. The protecting material is heavy sheet lead with a 7x10 lead glass window for observation. Larger windows can be furnished if desired at 5c per square inch. The size of screen is 2 ft. 7 in. wide and 5 ft. 10 in. high. The screen is black enameled.

A penetrometer is seen mounted near the window. This may be included or not, as desired. Those who like to test their tubes frequently will find it a great convenience.

No. E-74. Price of Protective Screen without penetrometer. (Code Word, Reentive) .... ~~**$35.00**~~ 45 00
Shipping weight, 140 lbs.

LEAD GLASS FOR X-RAY PROTECTION

	Code Word	Size	Price
No. E-75.	Tect	5 x 7	**$1.20**
	Tection	7¼x 9½	**2.10**
	Tecting	8 x10	**2.40**
	Tector	9½x12	**3.60**
	Tectate	12 x19	**7.20**
	Tectum	14 x17	**8.40**
	Tectice	16 x18	**9.60**
	Special sizes cut to order, per square inch		**.06**

VOID.

Prices subject to change without notice.

LEAD GLASS SHIELDS

For X-Ray Tubes

These are made of a special glass impregnated with as much lead as the glass will bear, and are practically impervious to the X-rays. We have this in the same size as used with our tube stands. (See Pages 14-16.)

No. E-76. (Code Word, Globex.) Price of lead glass shield only.............. **$12.00**

X-RAY LEAD FOIL

Price, lb.	**$0.30**
5 lbs.	**1.20**

X-RAY PROOF RUBBER GLOVES

Where fluoroscopic work is to be done, the operator should protect himself with X-ray proof gloves and apron, and the fluoroscope, which should have a high-grade sensitive screen, should be protected with lead glass.

No. E-77. X-Ray Proof Rubber Gloves, gauntlet type. (Code Word, Gaunt)........................**$11.00**

X-RAY PROOF RUBBER APRON

No. E-78. Price of X-Ray Proof Rubber Apron. (Code Word, Apricot) **$18.00**

X-RAY PLATE CHEST

The sensitive plates used in radiography should be kept in their original box standing on edge, in a cool, dry place, away from the operating room. If there is the least possibility of being reached by the X-rays, which will radiate over a radius of one hundred feet or more if not obstructed, they should be kept in an X-ray proof chest.

No. E-79. Holds from 2 to 2½ doz. 11 x14 X-Ray Plates. (Code Word, Safer)..**$15.00**
Shipping weight, 65 lbs.

No. E-79A. Holds from 4 to 6 doz. 14x17 X-Ray Plates. (Code Word, Safest)... **30.00**
Shipping weight, 130 lbs.

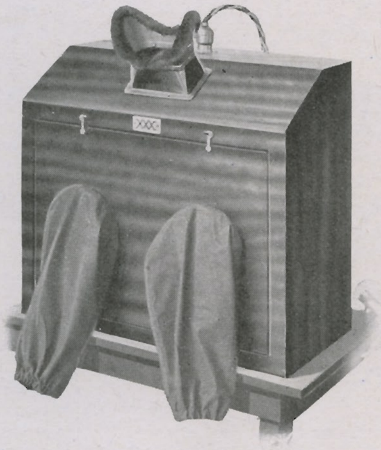
LEAD LINED CHEST FOR DENTAL FILMS.

Will hold 12 to 18 dozen dental films.

No. E-80. Price of plate chest for dental films. (Code Word, Safety)..........................**$4.50**

DARK ROOM SUPPLIES

DAYLIGHT DEVELOPING OUTFIT.



Large enough to hold three 8x10 trays. All metal, finished in quarter sawed oak, 23 inches wide, 13½ inches deep, 21 inches high. Has rack to hold envelopes inside.

No. E-81. Price of Daylight Developing Outfit. (Code Word, Delight)........**$35.00**
Shipping weight, 75 lbs.

PLATE ROCKER.

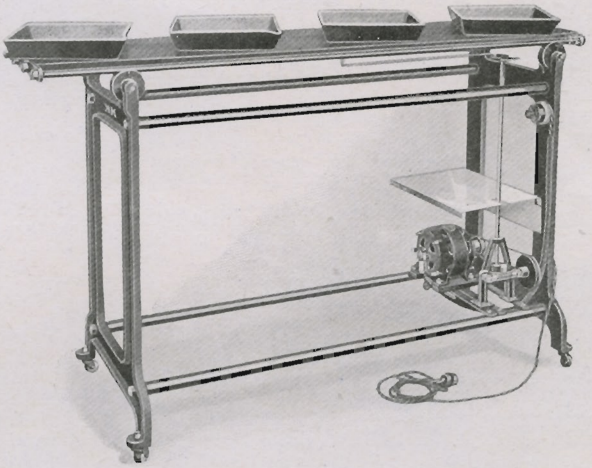
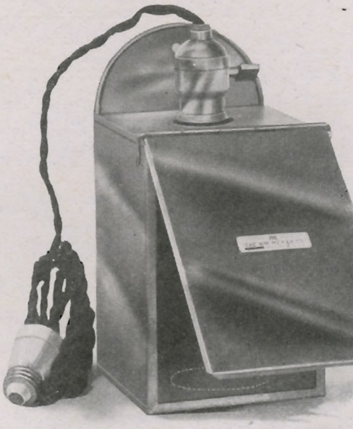


Plate Rocker machine with motor arranged for 110 volt D. C. or A. C. 60 cycle.

No. E-82. Price complete, without Trays. (Code Word, Rocket).............**$48.40**
Shipping weight, 175 lbs.

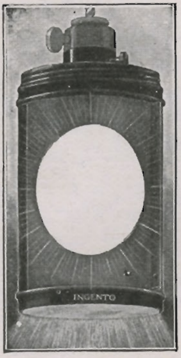


DARK ROOM LAMP.

This Dark Room Lamp is the latest and best type of safety light, while handling sensitive X-ray plates. Has eight candle power ruby light, with a 5x7 orange and ruby light in front and a 3-inch diameter light below. The large front light may be covered by the metal shutter.

Finished in oxidized copper with switch, 6 foot cord and plug complete.

No. E-83. Price of Dark Room Lamp. Code Word, Darken)......$3.00
$4.50



DARK ROOM LAMP No. 2.

This lamp is fitted with a screw top and can be instantly attached to any drop light socket. A sleeve, in which is cut three oval openings covered with ruby, orange and transparent fabric, revolves about the body of the lamp, which contains only one opening. Any colored light may be brought into play instantly by turning the sleeve. The bottom of the lamp is also fitted with a ruby and orange glass, which throws the light downward.

No. E-84. (Code Word, Ingento.) Price complete with cord, lamp and socket..........................$2.00
$3.00

DEVELOPING CHEMICALS.

No. E-85.	Eastman X-Ray Developing Powders. Per doz	**$1.80**
No. E-86.	Acid Hypo. Per lb	**.25**

Prices of chemicals subject to market fluctuations.

NEGATIVE PRESERVERS.

These envelopes are made of strong manilla paper, the proper size for negative.

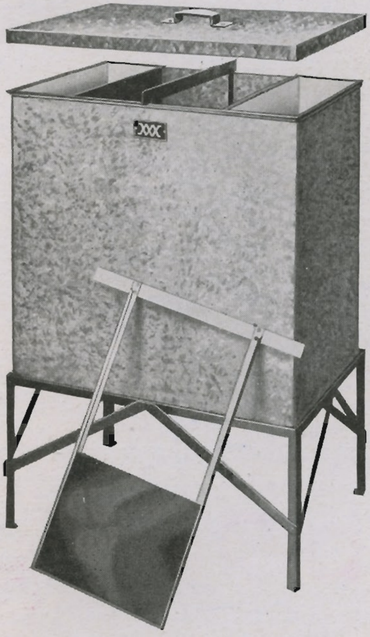
PRICES.

	Size	Per 100	Per 1000
No. E-87.	5 x 7	**$0.35**	**$ 2.80**
	6½x 8½	**.60**	**4.80**
	8 x10	**.65**	**5.50**
	10 x12	**1.35**	**10.80**
	11 x14	**1.80**	**14.40**
	14 x17	**2.25**	**18.20**

DEVELOPING, FIXING AND WASHING TANK.

There has long been a demand for a Washing, Fixing and Developing Tank for the use of the roentgenologist. Those offered heretofore have been clumsy, fragile and not at all adapted to such needs.

In bringing out this apparatus, we have had in mind that the majority want a means for washing the plates safely and if their needs required it, they would want to add a fixing box later. Those whose work makes it desirable to do time developing will also want a developing tank.



The large galvanized iron tank, 24x15″ by 24″ deep, is placed on a steel frame.

The porcelain lined tanks for fixing and developing fit snugly within, leaving ample space between for washing. Two frames to hold the plates are furnished, one to accommodate plates size 8x10″ and 10x12″, and the other 11x14″ and 14x17″.

No. E-94. Galvanized tank with one porcelain enameled tank. (Code Word, Tank) **$37.50**

No. E-95. Galvanized tank with two porcelain enameled tanks. (Code Word, Tanking) **50.00**

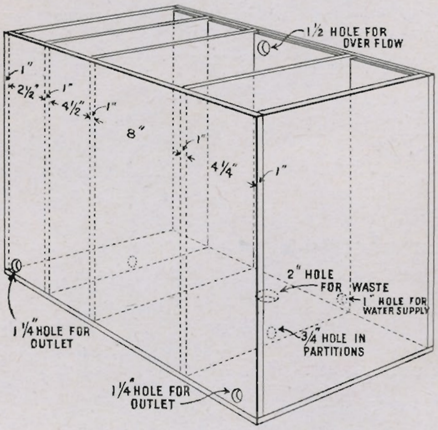
The above prices include stand and two plate frames and cover.

No. E-96. Extra frames to hold 2—11x14″ or 1—14x17″ plates. (Code Word, Lift) .... **$ 1.25**

No. E-97. Extra frames to hold 2—8x10″ or 2—10x12″ plates. (Code Word, Lifter) **1.25**

Shipping weight, complete, 90 lbs.

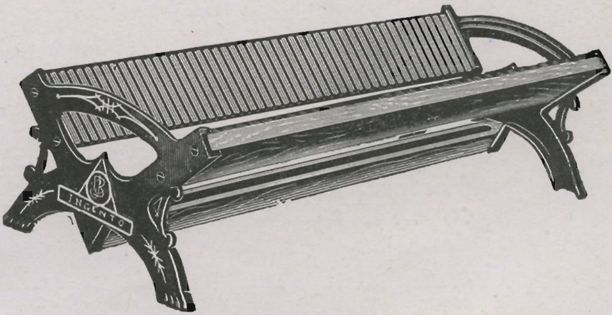
SOAP STONE DEVELOPING TANK



No. E-98. Four compartment stone developing tank. (Code Word, Quadrat).........**$40.00**

No. E-99. Six compartment stone developing tank. (Code Word, Sextant) **65.00**

DRYING RACK



The only rack of a size sufficient to hold large plates and a trough to catch the drip.

No. E-100. (Code Word, Drack.) Price.**$1.25**

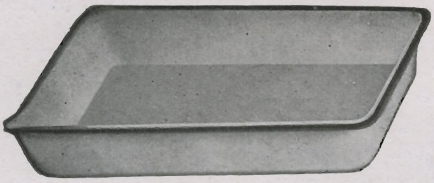
DEVELOPING TRAYS.

Hard rubber trays are, without question, if made like these, of first quality rubber, the best. They are light, flexible and do not chip, corrode or absorb solutions.

	Code Word	Size	
No. E-88.	Devet	8x10	Prices on application.
	Devetro	10x12	
	Devetring	11x14	

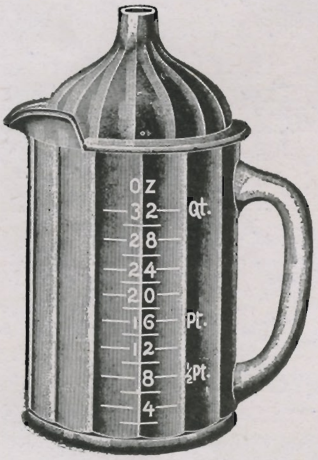
WHITE ENAMELED DEVELOPING TRAYS.

To those who prefer the porcelain enameled trays, we offer such.



	Code Word	Size	Price
No. E-89.	Enam	8x10	**$1.10**
	Enamit	10x12	**1.50**
	Enamo	11x14	**2.25**
	Enamor	14x17	**3.75**

(Above prices subject to change without further notice.)



MEASURING JUG.

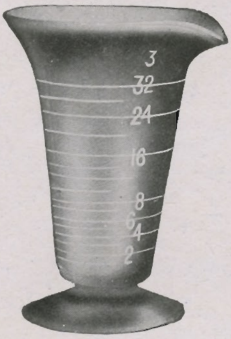
This is a handy and convenient adjunct to any dark room. It is made of flint glass in the shape of a pitcher and has graduations up to 32 ounces. The top is removable, and when inverted can be used as a funnel. The jug can be used either as a measuring glass or as a receptacle for solutions.

VOID.

No. E-90. (Code Word, Juggler.) Price.....**$0.50**

STIRRING ROD THERMOMETER

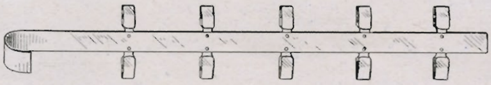
No. E-102. (Code Word, Thermos.) Price....**$1.00**



IDEAL GLASS GRADUATES.

These Graduates are specially made for photographic use. We guarantee them to be perfectly accurate. The lines and figures are etched on the outside.

No. E-91. (Code Word, Measure.) 8 oz. Price...~~**$0.33**~~ .50
No. E-92. (Code Word, Pourout.) 16 oz. Price... ~~**.50**~~ .70



DENTAL FILM DEVELOPING HOLDER.

No. E-93. (Code Word, Clamp) .**$1.50**

X-RAY PLATES

DIAGNOSTIC X-RAY PLATES

SIZE		Per Dozen With Two Env.	Per Dozen With 12 Env.	No. of Doz. Per Case	Weight Per Case
5 x 7	.....	$ 1.40	$ 1.70	20	60 lbs.
6½x 8½	.....	2.10	2.60	12	60 lbs.
8 x10	.....	3.00	3.50	10	70 lbs.
10 x12	.....	5.15	5.90	6	59 lbs.
11 x14	.....	7.25	8.25	4	90 lbs.
14 x17	.....	11.25	13.00	3	100 lbs.

PARAGON X-RAY PLATES

SIZE		Per Dozen With Two Env.	Per Dozen With 12 Env.	No. of Doz. Per Case	Weight Per Case
5 x 7	.....	$ 1.40	$ 1.65	20	55 lbs.
6½x 8½	.....	2.10	2.50	12	52 lbs.
8 x10	.....	3.00	3.50	10	64 lbs.
10 x12	.....	5.15	5.90	4	56 lbs.
11 x14	.....	7.25	8.25	4	72 lbs.
14 x14	.....	10.00	11.88	3	78 lbs.
14 x17	.....	11.25	13.00	3	82 lbs.

PARAGON X-RAY SCREEN PLATES

SIZE		Per Dozen With Two Env.	Per Dozen With 12 Env.	No. of Doz. Per Case	Weight Per Case
5 x 7	.....	$ 1.10	$ 1.35	20	55 lbs.
6½x 8½	.....	1.65	2.05	12	52 lbs.
8 x10	.....	2.40	2.90	10	64 lbs.
10 x12	.....	4.20	4.95	4	56 lbs.
11 x14	.....	6.00	7.00	4	72 lbs.
14 x17	.....	9.00	10.75	3	82 lbs.

SEED X-RAY PLATES

SIZE		Per Dozen With Two Env.	Per Dozen With 12 Env.	No. of Doz. Per Case	Weight Per Case
5 x 7	.....	$1.10	$ 1.40	20	60 lbs.
6½x 8½	.....	1.65	2.10	12	55 lbs.
8 x10	.....	2.40	3.00	10	70 lbs.
10 x12	.....	4.20	5.15	3	45 lbs.
11 x14	.....	6.00	7.25	3	55 lbs.
14 x17	.....	9.00	11.25	2	75 lbs.

X-RAY DENTAL FILMS

SIZE	Price Per Doz. Pr.
1¼x1⅝	$0.50
1½x2¼	.85
2¼x3 (Extra Rapid)	1.75

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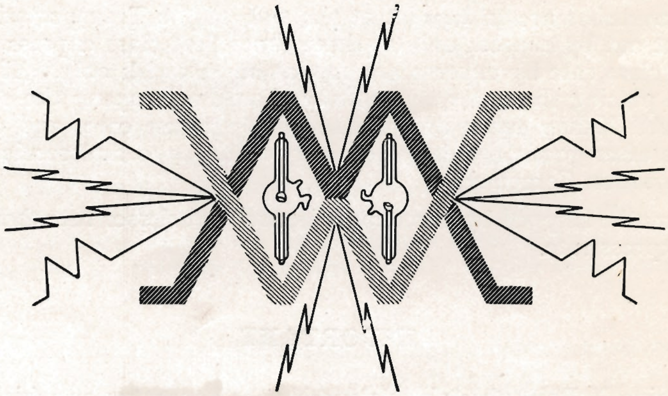
X-RAY TUBES

AND

HIGH FREQUENCY ELECTRODES



NOTE—Illustrations are not binding as to detail, in view of improvements.

Prices subject to change without notice.

THE WM. MEYER COMPANY
825 W. WASHINGTON BLVD.
CHICAGO, ILL.

REFERENCES

PURCHASERS unknown to us must furnish satisfactory references. Give three references and name of your bank if you wish to open a charge account. Send draft with order or we will ship C. O. D. Charges for the return of money to be borne by the purchaser.

TERMS

Prices in this bulletin supersede all previous, are subject to change without notice and are net, except for cash with order, when a 5% discount is allowed. Illustrations not binding as to detail in view of future improvements.

C. O. D. shipment, when accompanied by a draft for 25% of the order, will take the same discount.

Remit by money order, draft or certified check.

If X-Ray tubes are to be sent at the risk of the Transportation Company they are sent out by express only at three times first class express rate. Tubes sent at first class rate by express are sent at buyer's risk only. This should be stated when placing the order, and money should accompany the order in these instances. All X-Ray tubes are packed with extreme care, and our responsibility ceases after goods are delivered in good order to and receipt taken from the Transportation Company.

Tubes can be shipped by parcel post insured at a lesser rate than three times first class express rate.

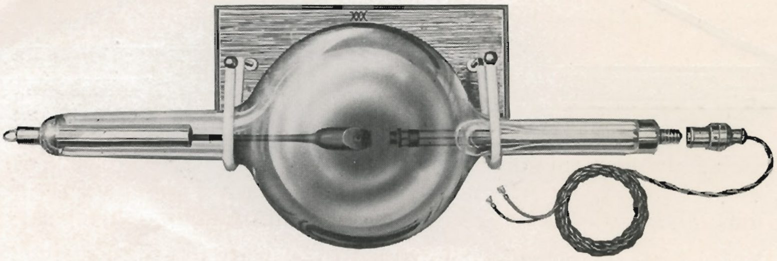
IMPORTANT

In ordering X-Ray tubes always specify the apparatus on which they are to be used. Also give the back up spark desired. A tube for chest work should have about 4 or 5 inches and a tube for abdominal work from 5 to 6½ inches. A tube of proper adjustment for a coil with its limited current will be of little service with the high tension converter.

EXPERIENCE covering a period of years has told the X-Ray specialist very plainly what type of X-Ray tube has proven the best for all around work, and will last longest and a first class X-Ray tube must have the following good points, definition, penetration, contrast, electrical and mechanical stability, and be repairable at a minimum cost.

Following, we list X-Ray tubes for use under all sorts of conditions, and on all types of generators, and for every class of work. New tubes will be added and improved as fast as experiments disclose points of value.

COOLIDGE X-RAY TUBE



For years it has been a fact well known that the X-Ray tube was the weakest link in the chain and that the improvement of the work, whether radio-therapy, radioscopy or radiography, depended on the improvement in X-Ray tubes.

The Coolidge tube represents a distinct advancement in X-Ray tubes. Those who have tried to do massive X-Ray treatment with the ordinary tube and failed because of the tube's variation, will appreciate this. For fluoroscopic work with the smallest possible current, less than 2 Milliamperes, and operating continuously, it is most excellent. But in radiography, where it is highly desirable to get maximum contrast and that the tube have just sufficient penetration for attaining this object, this tube has not shown itself equal to the gas tube.

A transformer or other device for heating the cathode filament must be employed and the devices made by us for the purpose are shown on pages 28 and 29 of the Accessory section of our catalog.

Coolidge tubes are made with sharp, medium or broad focus. The sharp focus tube will not take more than 25 Milliamperes and is to be recommended for fluoroscopy or radiography where time is no object.

The medium focus tube is intended to cover the general radiographic field. It will safely stand up to 45 Milliamperes.

The broad focus tube is intended for deep therapy and radiography of the gastro-intestinal tract. It stands safely up to 90 Milliamperes.

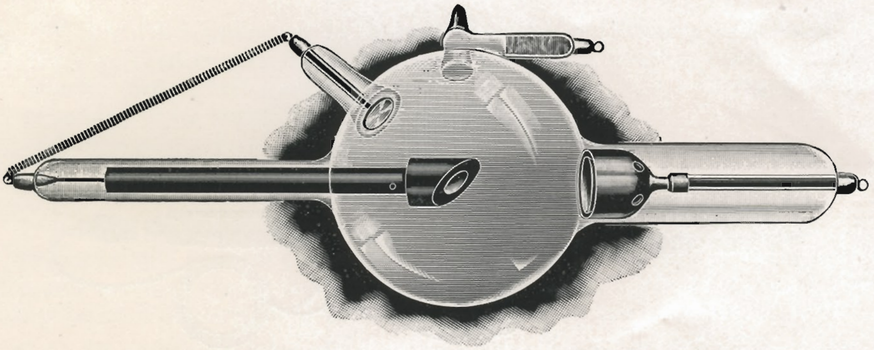
No. E 135—Coolidge tube (Code Word, Cooley) -- **$125.00**

(This price does not include the hanger shown in illustration.)

Allowance for old terminals of Coolidge tube-- **$15.00**

TUNGSTEN TARGET TUBES

With Steel Jacketed Cathode



Tungsten, the latest metal to be used for targets, is exceptionally hard, of greater density than platinum, with a high specific gravity and atomic weight, and safely withstands heat which fuses platinum. The radiographs obtained with these tubes are very fine and the time of exposure is reduced. The tungsten button is mounted in a heavy block of copper, which conducts the heat rapidly away.

The tubes used for the interrupterless, or transformer are not only exhausted differently but have the cathode adjusted differently to give a comparatively large but sharply defined focus which will not be materially altered because of a rise in vacuum.

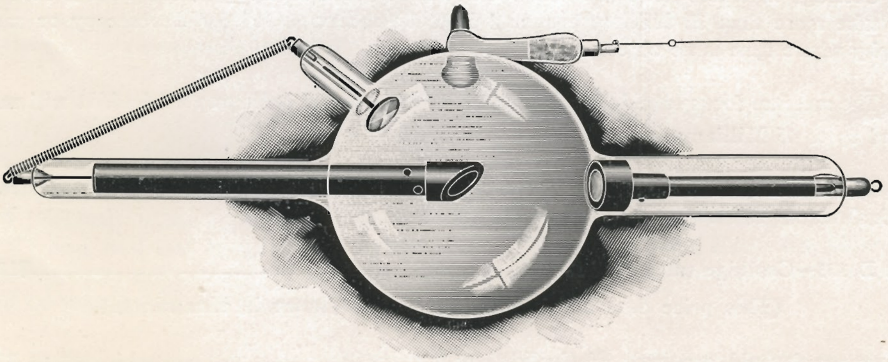
The tungsten coil tubes are of the same quality, but because of the smaller current available, the focus must be more concentrated and the tube exhausted to a higher vacuum to resist the higher voltage.

The prices of the tubes for transformer or coil are the same, but when ordering state explicitly by code word or otherwise for what apparatus intended.

For Transformer No. E-136 *Code Word*	For Coil No. E-137 *Code Word*	*Diameter*		*Price*
Tungstenic	Tuneo	6 inch	42.50	~~$33.50~~
Tungstico	Tunest	7 inch	45.00	~~38.50~~
Tungstique	Tuneticum	8 inch	55.00	~~43.50~~

MEYER RECTHODE TUBE

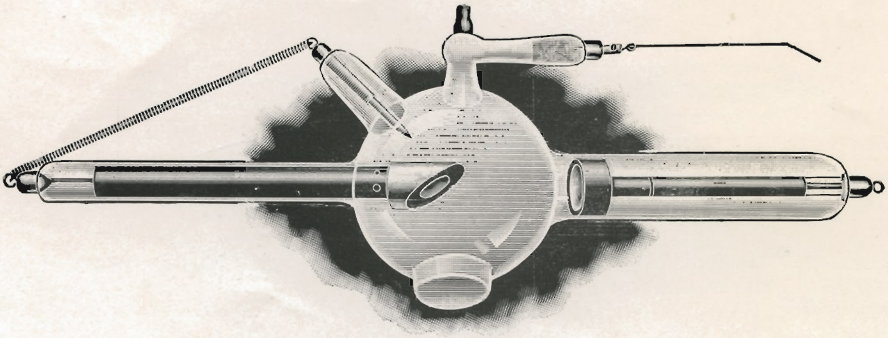
Trade Mark



This is a new type of a tube, made like E-136 with a heavy copper block tungsten target and shield over the cathode. It embodies the self rectifying principle and is required with our No. 1 transformer. It is made in the six inch bulb only.

	Code Word	*Diameter*		*Price*
No. E-138	Recthode	6 inch	45.00	~~$33.50~~ ~~$38.50~~

TUNGSTEN TARGET RECTHODE TUBE
FOR DENTAL RADIOGRAPHY



This tube is constructed of lead glass with a flint glass window opposite the central rays. It is therefore suited to dental radiography when used with the special holder, convenient to manipulate.

No. E-140	*Code Word*	*Price*
	Denthode	**$35.00**

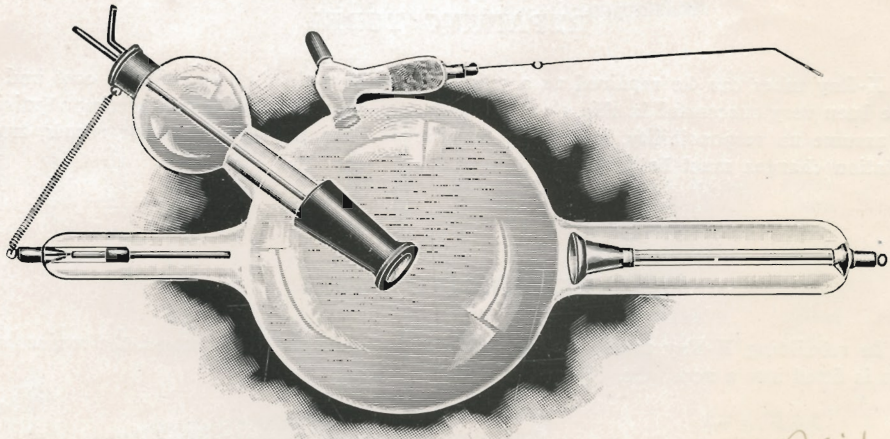
42-50

TUNGSTEN TARGET WATER-COOLED TUBE

This tube has a large extra chamber holding a quantity of water, which is brought in direct contact with the under surface of the target, and means are furnished to allow a constant flow of water which is discharged immediately back of the target and which keeps it cool. The tube can also be run by using only the water in the reservoir.

It may be run for long periods without overheating. A heavy screw cap on the water chamber prevents leakage.

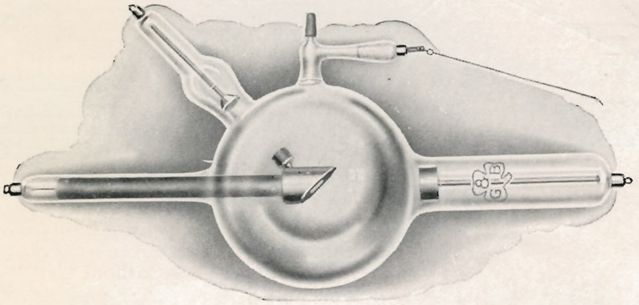
This tube is especially designed for fluoroscopy, and for therapeutics using the massive dose.



Void

No. E-139	*Code Word*	*Diameter*	*Price*
	Waged	7 inch	**$53.50**
	Wagner	8 inch	**58.50**

HIGH FREQUENCY COIL TUBES



TUNGSTEN TARGET FOR HEAVIEST HIGH FREQUENCY COILS

No. E-141

Code Word	*Diameter*	*Price*
Hydra	6 inch	42.50 ~~$33.50~~
Hyemal	7 inch	45.00 ~~38.50~~
Hydrog	8 inch	55.00 ~~43.50~~

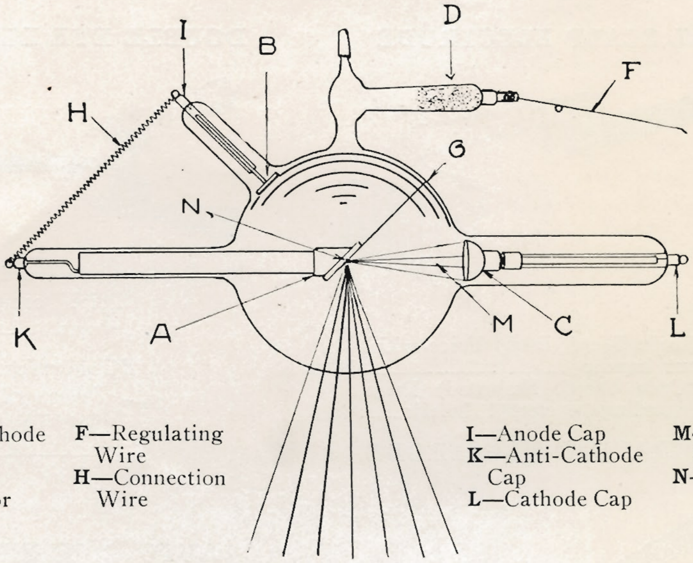
Shipping weight of an X-Ray tube in an open crate, 8 lbs.

REPAIRING TUBES

X-Ray tubes can be repaired as a rule at about one-third their original cost and we have been very successful in this class of work. In case the tube breaks during repairing, we assume no responsibility, and make no charges. **On all tubes sent for repair, transportation charges must be prepaid.**

REBUILDING TUBES

In rebuilding X-Ray tubes, we use nothing from the old tube except the anticathode. This is fitted into a new tube. Prices on application.



A—Anti-Cathode
B—Anode
C—Cathode
D—Regulator
F—Regulating Wire
H—Connection Wire
I—Anode Cap
K—Anti-Cathode Cap
L—Cathode Cap
M—Cathode Stream
N—Focal Point

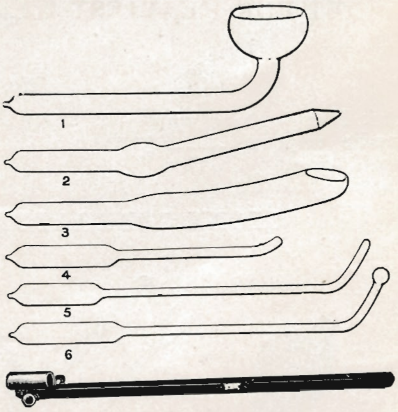
HIGH FREQUENCY ELECTRODES

Plain

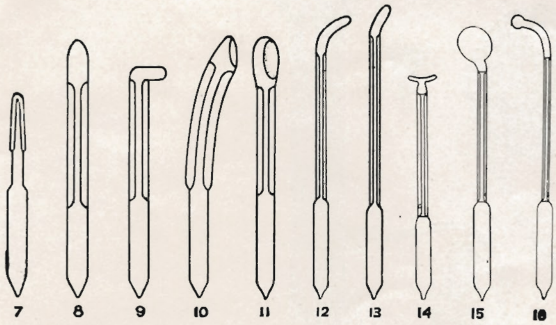
No. E-143 Price per set of six, (Code Word, Embody) $3.50

No. E-144 Price of handle (Code Word, Emblem) .... .75

Price per electrode...... .75



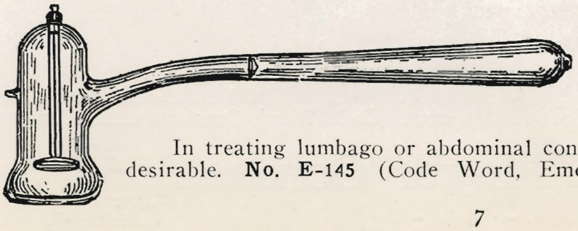
No. 1. Body Electrode
2. Rectal
3. Vaginal
4. Nasal
5. Urethral
6. Throat
Universal Handle



Insulated

No.	Code Word	Price
7. Ear	Eland	$1.50
8. Rectal	Elate	1.50
9. Post Nasal	Elect	1.50
10. Cervical	Elem	1.50
11. Prostatic	Elide	1.50
12. Urethral	Elimy	1.50
13. Nasal	Elix	1.50
14. Gum	Else	1.50
15. Tongue	Elong	1.50
16. Throat	Elm	1.50

adv. to 1.85 ea.

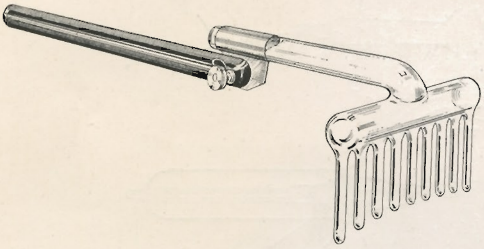


SPECIAL BODY ELECTRODE

In treating lumbago or abdominal conditions, this will be found especially desirable. **No. E-145** (Code Word, Emend) Price **$3.00**

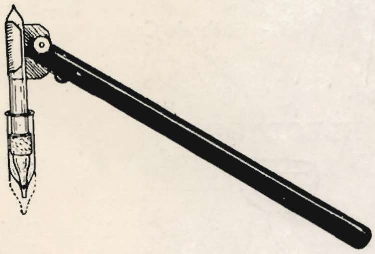
TRADE MARK

IDEAL SCALP ELECTRODE



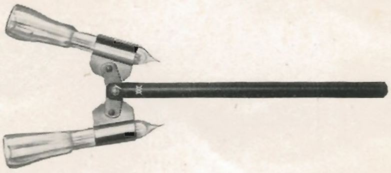
No. E-146 (Code Word, Etch) Price without handle -------------------- $1.50
(Code Word, Etchroad) Price including universal handle---- 2.25

FULGURATION ELECTRODE



No. E-148 (Code Word, Flung) Price with special handle required-------- $2.50
(Code Word, Flunky) Price without handle -------------- 1.75

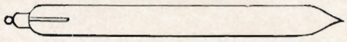
DOUBLE EYE ELECTRODE



No. E-147 (Code Word, Elbow) Price complete as shown ---------- $2.00

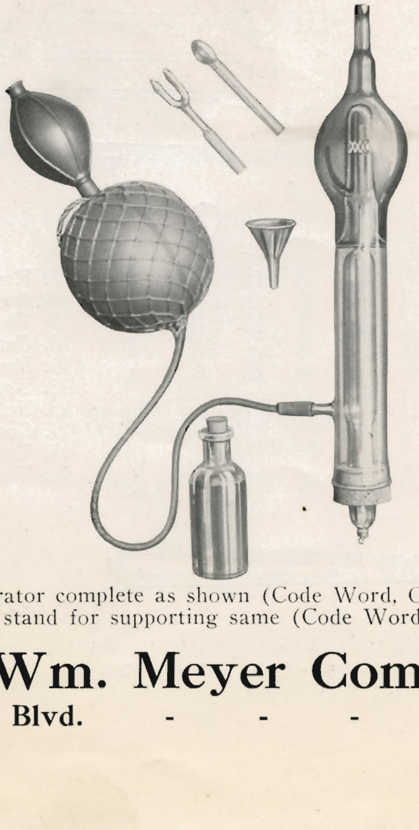
(Code Word, Eylid) Price of Single Eye Electrode ea. ------------------ .75

AUTO CONDENSATION ELECTRODE



No. E-149 (Code Word, Exact) Price ------------ $1.50

OZONE GENERATOR



No. E-150	Price of generator complete as shown (Code Word, Ozone)-------------	$10.00
No. E-151	Price of floor stand for supporting same (Code Word, Ozostand)--------	5.00